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ARCADIS
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ARCADIS
6723 Towpath Road
P.O. Box 66
Syracuse
New York 13214-0066
Tel 315.446.9120
Fax 315.671.9450
www.arcadis-us.com

Mr. Keith Krawczyk
MDEQ-RRD-Superfund
Constitution Hall – 3rd Floor South
P.O. Box 30426
525 West Allegan Street
Lansing, MI 48909-7926

ENVIRONMENTAL

Subject:
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit 3
Summary of Delineation Sampling at R-2 and R-5 Areas

Date:
February 18, 2009

Contact:
Michael Hassett

Phone:
315.671.9266

Email:
Michael.Hassett@
arcadis-us.com

Our ref:
B0064583.675 #2

Dear Keith:

This document presents a detailed summary of the approach and results for the delineation of polychlorinated biphenyl (PCB)-contaminated material at the R-2 and R-5 areas in the Michigan Department of Transportation (MDOT) Right-of-Way (R-O-W) located along the southern edge of the King Highway Landfill Operable Unit 3 (KHL OU) of the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site (Site). The KHL OU and the R-2 and R-5 areas are shown on Figures 1 and 1A.

On August 1, 2008 the Michigan Department of Attorney General (MDAG) issued a letter requesting that additional work be conducted in the MDOT R-O-W – specifically, at areas R-2 and R-5. Pursuant to Task Items 1(a) and 1(b) on Page 2 of that letter, Georgia-Pacific, LLC (Georgia-Pacific) has conducted delineation and sampling work at the R-2 and R-5 areas. Accordingly, this letter provides a summary of the delineation and sampling information, per Task Item 1(c) on Page 2 of MDAG's August 1, 2008 letter.

This document is organized as follows:

1. Delineation sampling in the R-2 and R-5 areas
2. Summary evaluation of delineation sampling at the R-2 and R-5 areas
3. Future activities and schedule

These items are discussed in further detail below.

1. Delineation Sampling in the R-2 and R-5 Areas

R-2 Area

The R-2 area is the location where an isolated area of residuals was observed at approximately 13 feet below ground surface (bgs) at the western end of the initial April 2008 excavation area (referred to hereinafter as the R-2 excavation). Prior to conducting the additional delineation sampling activities in August and September 2008 (discussed below), data were generated during previous remediation and investigation activities near the R-2 area. Following the initial excavation activities conducted in April 2008, a total of ten post-excavation confirmation floor samples (EF-1 through EF-10) and nine post-excavation confirmation sidewall samples (ESW-1 through ESW-9) were collected from the R-2 excavation for PCB analysis. Analytical results from the post-excavation confirmation sample locations in the portion of the R-O-W south of the site security fence (i.e., the property line) indicated PCB concentrations below the Part 201 Soil Direct Contact Residential & Commercial I Cleanup Criterion (i.e., 4 parts per million [ppm]; residential cleanup criterion), with the exception of sidewall sample ESW-4, which indicated a PCB concentration of 13 ppm. These analytical results are presented in Table 1 (attached) and shown on Figure 2.

On May 21, 2008, Georgia-Pacific advanced Soil Borings SB-17 and SB-18 in the area of previous post-excavation confirmation sample ESW-4. Samples were collected from Soil Borings SB-17 and SB-18 to confirm the accuracy of the ESW-4 sample result, and indicated 0.14J ppm and 12 ppm for total PCBs, respectively. As such, the PCB analytical result from sample SB-18 (12 ppm) confirmed the accuracy of the PCB analytical result for ESW-4 (13 ppm), and therefore, the ESW-4 location was re-excavated on June 11, 2008. Post-excavation confirmation samples EF-11, ESW-10, and ESW-11 were collected from the ESW-4 re-excavation area and all three samples exhibited PCB concentrations below 1 ppm. These analytical results are presented in Table 1 (attached) and shown on Figure 2. Soil Borings SB-19 through SB-23 were also advanced on May 21, 2008 to determine the presence of residuals south of the site security fence. Samples from these soil borings were visually examined for the presence of residuals; however, no samples were collected by Georgia-Pacific for PCB analysis. These soil boring locations (SB-19 through SB-23) are shown on Figures 2, 2A, 3 and 3B.

The above data obtained from the R-2 area were used in the decision making process and are used to delineate the extent of PCB-contaminated material. The additional delineation sampling conducted following issuance of MDAG's August 1, 2008 letter is discussed below.

During an on-site meeting held August 6, 2008 among representatives of Georgia-Pacific and MDEQ, Georgia-Pacific agreed to advance additional soil borings to

delineate the extent of PCB-contaminated material around the R-2 area. On August 13, 2008 Georgia-Pacific advanced 10 soil borings (SB-24 through SB-33), initiated at the approximate location where residuals were previously documented, and continuing outward radially (see Figures 2 and 2A). All 10 soil borings were advanced to approximately 16 feet bgs, with cores collected at the 0- to 4-foot depth interval, the 4- to 8-foot depth interval, the 8- to 12-foot depth interval, and the 12- to 16-foot depth interval.

A two-inch layer of residuals was observed in Soil Boring SB-27 at approximately 11.5 feet bgs. Very small quantities of residuals – observed as small, isolated bits in a narrow zone (< 1 inch) mostly near the bottom of the 8- to 12-foot depth interval (correlating approximately with the depth to which excavation was conducted in April 2008) – were present in Soil Borings SB-24 (also in the 4- to 8-foot bgs core), SB-28, SB-29, SB-30, and SB-32 (also in the 12- to 16-foot bgs core), located south, west, and north of SB-27. No residuals were observed in Soil Borings SB-25, SB-26, SB-31, or SB-33, located west, south, and east of Soil Boring SB-27. These observations thereby confirm that residuals observed during excavation at R-2 and in Soil Boring SB-27 are not continuous in those directions and appear to be very limited in extent.

Samples were collected from between approximately 9 to 13 feet bgs in cores from each of the ten soil borings, and were submitted for laboratory analysis of PCB. Sample collection was biased towards collecting a sample where residuals were present; or from the same general depth as the bottom of historic excavation; or from the April 2008 excavation conducted in the R-2 area; and/or by taking into account the lithology of each core. Sample designations, locations, and PCB results for Soil Borings SB-24 through SB-33 (categorized based on the presence and extent of residuals within the samples) are summarized in Table A below.

Table A – R-2 Area Soil Boring Samples

Soil Boring	Presence/Extent of Residuals w/in Sample	Sample Depth Interval (feet bgs)	Total PCB Result (ppm)
SB-25	None	8-12	0.17 J
SB-26	None	12-16	ND
SB-31	None	12-16	0.057 J
SB-33	None	8-12	ND
SB-24	Small/Isolated	8-12	0.38 J
SB-28	Small/Isolated	8-12	2.1
SB-29	Small/Isolated	8-12	3.4
SB-30	Small/Isolated	8-12	0.75
SB-32	Small/Isolated	8-12	0.067
SB-27	Distinct Layer (~2")	8-12	45

Notes:
1. ND = Not detected.
2. J = Data qualifier used to indicate that the concentration is estimated.
3. bgs = Below ground surface.
4. ppm = Parts per million.
5. When residuals were present, samples were biased towards collecting visible residuals.

Complete analytical results are presented in Table 2 (attached), and sample locations are shown on Figures 2 and 2A. During a conference call held on Friday, September 12, 2008 with representatives of MDEQ, MDAG, Georgia-Pacific, and ARCADIS, MDEQ communicated that based on information provided by Georgia-Pacific, delineation of the R-2 area appeared to be complete.

R-5 Area

The R-5 area is the location where residuals were observed in a test pit located south of the site security fence (i.e., the property line) and immediately east of the entrance road to the KHL. Based on the observation of residuals in the test pit, excavation of the R-5 area was initiated on May 22, 2008 and continued on May 23 and May 27, 2008. Following excavation on these three days, three post-excavation confirmation samples were collected from the excavation floor (R-5EF-1, R-5EF-2, and R-5EF-3) and one post-excavation confirmation sample was collected from the eastern half of the southern sidewall (R-5ESW-1) on May 28, 2008. All four samples were non-detect for PCB. These analytical results are presented in Table 1 (attached) and shown on Figures 3 and 3B. However, residuals were still present along the eastern sidewall, the western sidewall, and the western half of the southern sidewall.

On May 29, 2008, two sets of samples were collected from the excavation sidewalls where residuals were present for characterization purposes. The first set of sample locations from the excavation sidewalls was biased towards collecting only pure residuals observed along the sidewalls (R-5WW-A, R-5SW-A, and R-5EW-A). The second set of excavation sidewall samples (R-5WW-GRID, R-5SW-GRID, and R-5EW-GRID) was collected using a compositing approach, with each sidewall sample being formed by compositing 9 discrete grab samples spatially distributed along the sidewall in a square grid pattern. Analytical results from these samples are presented in Table 3 (attached) and shown on Figures 3 and 3B.

The above data obtained from the R-5 area were used in the decision making process and are used to delineate the extent of PCB-contaminated material. The additional delineation sampling conducted following issuance of MDAG's August 1, 2008 letter is discussed below.

During the August 6, 2008 meeting held among representatives of Georgia-Pacific and MDEQ, Georgia-Pacific agreed to further investigate the R-5 area by excavating a series of test pits. The test pit approach was used because in contrast to soil borings, test pits provide for a much larger cross-section within which to view the distribution of residuals. On August 13, 2008 two test pits (Test Pits 5 and 6; each approximately 3 feet wide by 10 feet long by 10 feet deep) were excavated to the east and south of the existing R-5 excavation area (Test Pits 5 and 6 are illustrated on Figures 3 and 3B). No residuals were observed in Test Pit 6, and soils excavated

from that test pit were placed back in their original location. A ≤ 1-inch seam of residuals was observed at approximately 1 to 1½ feet bgs in Test Pit 5, similar to the thin seam observed at that same approximate depth in the R-5 excavation area. Residuals were also observed at approximately 4 to 8 feet bgs and 10 feet bgs. Soils removed from Test Pit 5 were transported to the Environmental Quality Company's (EQ's) Wayne Disposal, Inc. Site #2 Landfill for disposal.

Portions of the R-5 excavation were re-excavated on August 13, 2008 to allow a clean view of excavation sidewalls and floor to evaluate the presence of isolated residuals and residual layers, and possible connection to residuals observed in Test Pit 5. Composite samples were collected along the eastern, western, and southern sidewalls of the R-5 excavation area on August 14, 2008. Composite samples were collected based on our interpretation of Title 40 of the Code of Federal Regulations (CFR) Subpart O (761.283 and 761.289) and formed by compositing nine discrete grab samples distributed in a square grid pattern. However, within each of the nine representative grid nodes, the discrete grab samples were biased towards collecting visible residuals. The grids were selected based on visual observations of the presence of residual layers, nodules, and lack thereof. This approach included the collection of a composite sample from the 0- to 4-foot depth interval (R-5-EW-COMP-[0-4], R-5-WW-COMP-[0-4], and R-5-SW-COMP-[0-4]), the 4- to 8-foot depth interval (R-5-EW-COMP-[4-8], R-5-WW-COMP-[4-8], and R-5-SW-COMP-[4-8]) and the 0- to 10-foot depth interval (R-5-EW-COMP-[0-10], R-5-WW-COMP-[0-10], and R-5-SW-COMP-[0-10]) of each of the three sidewalls (see Figure 3 for locations) to provide a range of potentially acceptable sampling approaches for future submittal in an application to the United States Environmental Protection Agency (USEPA) for risk-based disposal of the remaining material from the R-5 area at a non-hazardous (Type II) landfill under 40 CFR 761.61(c). As noted above, a very thin (i.e., ≤ 1 inch) seam of residuals was observed at approximately 1 to 1½ feet bgs along the three sidewalls. In addition, more substantial amounts of residuals were observed within the 4- to 8-foot depth interval of the sidewalls. While there were no residuals observed at depths greater than 8 feet bgs, composite samples were collected to a depth of 10 feet to adequately characterize materials down to the water table – previous excavations in the R-O-W have generally extended to the water table. Sampling locations and results are shown on Figure 3. Complete analytical results are presented on Table 3 (attached).

In accordance with a work plan submitted to MDEQ on September 16, 2008, on Wednesday, September 17, 2008 three test pits (Test Pits 7, 8, and 9; each approximately 4 feet wide by 20 feet long by 10 feet deep) were excavated to the east and south of Test Pit 5 (Test Pits 7 through 9 are illustrated on Figures 3 and 3B). No residuals were observed in Test Pit 8 (located to the south of Test Pit 5), and soils excavated from that test pit were placed back in their original location. Residuals were observed in the eastern test pits (Test Pits 7 and 9), and soils removed from those test pits were transported to EQ's Wayne Disposal, Inc. Site #2

Landfill for disposal. The residuals observed in Test Pits 7 and 9 were present in very small quantities at various depths ranging between 3 and 10 feet bgs. The total volume of soils excavated from Test Pits 7 through 9 was approximately 90 cubic yards (cy); however, the combined volume of residuals observed within these test pits appeared to total no more than 2 cubic feet (0.074 cy), or < 0.1 percent of the total mass of excavated soils.

Samples were collected for PCB analysis from material collected from Test Pits 7 through 9. Sample designations, locations, and PCB results are summarized in Table B below.

Table B – R-5 Area Test Pit Samples

Test Pit Sample ID	Presence/Extent of Residuals w/in Sample	Approximate Sample Depth (feet bgs)	Total PCB Result (ppm)
TP-8	None	5	ND
TP-7-1	Small/Isolated	9-10	ND
TP-7-2	Small/Isolated	5½	14 J
TP-7-3	Small/Isolated	5½	ND
TP-9-1	Small/Isolated	3	7
TP-9-2	Small/Isolated	3½	63
TP-9-3	Small/Isolated	10	0.069
TP-7-COMP	Soils/Residuals Mixture	Various	0.084

Notes:
1. ND = Not detected.
2. J = Data qualifier used to indicate that the concentration is estimated.
3. bgs = Below ground surface.
4. ppm = Parts per million.
5. TP-7-COMP consisted of 10 discrete grab samples from the soils excavated from the test pit, including both residuals and soils free of residuals.
6. When residuals were present, samples were biased towards collecting visible residuals.

Complete analytical results are presented in Table 4 (attached), and sample locations are shown on Figures 3 and 3B. To supplement the test pit excavations, 13 soil borings (SB-34 through SB-46, depicted on Figure 3) were advanced to approximately 12 feet bgs, with cores collected at the 0- to 4-foot depth interval, the 4- to 8-foot depth interval, and the 8- to 12-foot depth interval.

Nine of the 13 soil borings (SB-34 through SB-36, and SB-38 through SB-43) were located between the KHL access road and the western edge of Georgia-Pacific's frontage along the MDOT R-O-W. These nine soil borings were advanced to facilitate the westward delineation of PCB-contaminated material. Residuals were observed in eight of the nine soil borings – none were observed in Soil Boring SB-39. A total of 28 samples were collected from these nine soil borings and analyzed for PCBs – results are summarized in Table C below. Note that the data are categorized based on the presence and extent of residuals within the samples, rather than sequentially based on Sample ID designations.

Table C – R-5 Area Soil Boring Samples West of Access Road

Soil Boring	Presence of Residuals w/in Sample	Sample Depth Interval (feet bgs)	Total PCB Result (ppm)
SB-34	None	0-4	0.27 J
SB-35	None	0-4	0.22
SB-35	None	8-12	ND
SB-36	None	8-12	ND
SB-38	None	0-4	0.95
SB-39	None	0-4	0.033 J
SB-39	None	4-8	0.077
SB-39	None	8-12	ND
SB-40	None	4-8	ND
SB-40	None	8-12	ND
SB-41	None	4-8	ND
SB-42	None	0-4	1.4 J
SB-42	None	8-12	ND
SB-43	None	4-8	ND
SB-43	None	8-12	ND
SB-34	Small/Isolated	4-8	6.8
SB-34	Small/Isolated	8-12	ND
SB-35	Small/Isolated	4-8	7.3
SB-36	Small/Isolated	0-4	1.7
SB-36	Small/Isolated	4-8	2.4
SB-38	Small/Isolated	8-12	0.09
SB-40	Small/Isolated	0-4	0.72
SB-41	Small/Isolated	8-12	ND
SB-38	Distinct Layer (~7")	4-6	70
SB-38	Distinct Layer (~1")	6-8	47
SB-41	Distinct Layer (~2")	0-4	19
SB-42	Distinct Layer (~3")	4-8	27
SB-43	Distinct Layer (~1")	0-4	7.7

Notes:
1. ND = Not detected.
2. J = Data qualifier used to indicate that the concentration is estimated.
3. bgs = Below ground surface.
4. ppm = Parts per million.

Complete analytical results are presented in Table 5 (attached), and sample locations are shown on Figures 3 and 3A. Of the 28 samples analyzed for PCBs, 15 samples contained soils free of residuals, eight samples contained soils with small/isolated bits of residuals, and five samples contained distinct layers of residuals. PCB concentrations in the 15 samples containing soils free of residuals ranged from non-detect to 1.4 J ppm. PCB concentrations in the eight samples containing soils with small/isolated bits of residuals ranged from non-detect to 7.3 ppm. Lastly, PCB concentrations in the five samples containing distinct layers of residuals ranged from 7.7 to 70 ppm.

The remaining four soil borings (SB-37 and SB-44 through SB-46) were co-located near Test Pits 6 through 9, east of the KHL access road. Unstable soils and slope failures within the test pits prevented the collection of side-wall samples; therefore,

these four soil borings were co-located with Test Pits 6 through 9 to generate samples with known vertical position, as summarized below.

- **Soil Boring SB-37** – located directly south of Test Pit 6
- **Soil Boring SB-44** – located at the northeast corner of Test Pit 7 (targeted near the approximate location where residuals were previously observed in the test pit)
- **Soil Boring SB-46** – located directly east of Test Pit 8 and directly south of Test Pit 7
- **Soil Boring SB-45** – located at the southwest corner of Test Pit 9

The locations of these soil borings were determined in consultation with on-site CDM personnel. Data corresponding to the 0- to 4-foot depth interval, 4- to 8-foot depth interval, and 8- to 12-foot depth interval were generated at each location. No residuals were observed in Soil Borings SB-37, SB-45, and SB-46; however, small/isolated residuals were observed in Soil Boring SB-44 in the 4- to 8-foot and 8- to 12-foot depth intervals. The PCB concentrations corresponding to these four soil borings ranged from non-detect to 2.2 ppm.

Sample designations, locations, and PCB results for these four soil borings are summarized in Table D below.

Table D – R-5 Area Soil Boring Samples East of Access Road; Co-Located w/Test Pits

Soil Boring	Presence of Residuals w/in Sample	Sample Depth Interval (feet bgs)	Total PCB Result (ppm)
SB-37	None	0-4	0.08
SB-37	None	4-8	0.035 J
SB-37	None	8-12	ND
SB-44	None	0-4	ND
SB-45	None	0-4	ND
SB-45	None	4-8	ND
SB-45	None	8-12	ND
SB-46	None	0-4	0.13
SB-46	None	4-8	0.04 J
SB-46	None	8-12	0.47
SB-44	Small/Isolated	4-8	2.2
SB-44	Small/Isolated	8-12	1.2

Notes:
1. ND = Not detected.
2. J = Data qualifier used to indicate that the concentration is estimated.
3. bgs = Below ground surface.
4. ppm = Parts per million.

Complete analytical results are presented in Table 5 (attached), and sample locations are shown on Figures 3 and 3B. At Georgia-Pacific's request, a conference call with MDEQ was held on Monday, September 22, 2008 to summarize and discuss the field work completed on September 17 and 18, 2008. Georgia-Pacific stated that based on the presence of residuals in the western- and southern-most soil borings (i.e., SB-41 through SB-43), additional delineation to the west of its frontage (i.e., beyond the portion of the R-O-W in front of, and adjacent to, the KHL OU) was warranted, but that based on prior communications with MDOT, the adjacent property owners (Kalamazoo Metal Recyclers [KMR] and L.D. Docsa Associates, Inc. [L.D. Docsa]) would have to be notified. The next day (September 23, 2008), MDOT provided clarification that it owned the fee interest in the R-O-W property located in front of KMR's and L.D. Docsa's property; MDOT reiterated its request that Georgia-Pacific notify those property owners of the intended sampling activities. On September 24, 2008 ARCADIS distributed letters to KMR and L.D. Docsa that a) notified the owners of the intent to sample within the R-O-W in front of their properties; and b) requested permission to access their properties in the event that the delineation efforts encroached into their properties.

After providing notice to the adjacent property owners, Georgia-Pacific remobilized to the KHL OU on September 26, 2008 and advanced four additional soil borings (SB-47 through SB-50) to the west and south of the previous set of soil borings located west of the KHL OU access road. No residuals were observed in any of the four additional soil borings. Soil cores were collected from each of the four soil borings at the 0- to 4-foot depth interval, the 4- to 8-foot depth interval and the 8- to 12-foot depth interval. A total of 12 samples were collected from the soil borings and submitted for laboratory analysis of PCB. PCBs were detected in only two of the 12 samples, at concentrations of 0.03 J and 0.13 ppm.

Sample designations, locations, and PCB results for these four soil borings are summarized in Table E below.

Table E – R-5 Area Soil Boring Samples West of Access Road

Soil Boring	Presence/Extent of Residuals w/in Sample	Sample Depth Interval (feet bgs)	Total PCB Result (ppm)
SB-47	None	0-4	ND
SB-47	None	4-8	ND
SB-47	None	8-12	ND
SB-48	None	0-4	ND
SB-48	None	4-8	ND
SB-48	None	8-12	ND
SB-49	None	0-4	0.13
SB-49	None	4-8	ND
SB-49	None	8-12	ND
SB-50	None	0-4	0.03 J
SB-50	None	4-8	ND
SB-50	None	8-12	ND

Notes:
1. ND = Not detected.
2. J = Data qualifier used to indicate that the concentration is estimated.
3. bgs = Below ground surface.
4. ppm = Parts per million.

Complete analytical results are presented in Table 5 (attached), and sample locations are shown on Figures 3 and 3A. Based on the test results described above, Georgia-Pacific concluded that the additional delineation sampling at the R-2 and R-5 areas was complete. The 4 ppm residential cleanup criterion was applied for delineation purposes, and the data were spatially interpolated to identify the horizontal and vertical extent of materials having PCB concentrations ≥4 ppm. The resulting delineation of the horizontal and vertical extent of PCB-contaminated material is shown on Figures 4 and 5, and is discussed further below. Lastly, Figures 6 through 12 present several photographs of the investigation work described above – including the R-5 excavation area and the corresponding composite sampling locations, Test Pits 5 through 9, and the residuals observed in Test Pits 7 and 9.

2. Summary Evaluation of Delineation Sampling at the R-2 and R-5 Areas

R-2 Area

Based on the results of the delineation sampling at the R-2 area, delineation of the R-2 area is complete. With the exception of Soil Boring SB-27, the other nine soil samples contained PCB concentrations below the residential cleanup criterion (4 ppm). While there was a 2-inch-thick presence of residuals recovered from Soil Boring SB-27 with a PCB concentration of 45 ppm, this is likely an isolated nodule of residuals that is a remnant of the original excavation work conducted in this area in April 2008 and not indicative of an in-place mass of residuals. This assessment is supported by the finding that there were either no or very sparse nodules of residuals encountered in the five soil borings (Soil Borings SB-24 through SB-26, SB-28, and SB-29) advanced within 1 to 2 feet horizontally from Soil Boring SB-27, and the

Tables (embedded):

A	R-2 Area Soil Borings
B	R-5 Area Test Pit Samples
C	R-5 Area Soil Boring Samples West of Access Road
D	R-5 Area Soil Boring Samples East of Access Road; Co-Located w/Test Pits
E	R-5 Area Soil Boring Samples West of Access Road
F	Statistical Analysis of Discrete Grab Samples

Tables (attached):

1	Previous Post-Excavation Confirmation Sampling and Soil Boring Data from R-2 and R-5 Areas
2	Additional Soil Boring Data Collected at R-2 Area
3	PCB Characterization Sampling Data Collected at R-5 Area
4	Test Pit Sampling Data
5	Additional Soil Boring Data Collected at R-5 Area

Figures (attached):

1	KHL Site Plan – R-2 & R-5 Areas
1A	KHL Site Plan – R-2 & R-5 Areas
2	R-2 Area
2A	R-2 Area
3	R-5 Area
3A	R-5 Area (West)
3B	R-5 Area (East)
4	Horizontal Delineation
5	Vertical Delineation
5A	Vertical Delineation
5B	Vertical Delineation – Cross Section A
5C	Vertical Delineation – Cross Section B
6	R-5 Excavation Area – May 29, 2008 Grid Composite Sample Photos
7	R-5 Excavation Area and Test Pit 5 Photos
8	R-5 Excavation Area and Test Pit 6 Photos
9	R-5 Excavation Area – August 14, 2008 Grid Composite Sample Photos
10	R-5 Excavation Area – August 14, 2008 Grid Composite Sample Photos
11	Test Pit 7 Photos
12	Test Pit 8 and 9 Photos

Copies:
Daria Devantier, Michigan Department of Environmental Quality
Judith Gapp, Michigan Department of Environmental Quality
Polly Synk, Michigan Department of Attorney General
Peter Ramanauskas, United States Environmental Protection Agency
Jean Greensley, United States Environmental Protection Agency
Michael Berkoff, United States Environmental Protection Agency
J. Michael Davis, Esq., Georgia-Pacific, LLC
Paul Montney, P.E., Georgia-Pacific, LLC
L. Chase Fortenberry, P.G., Georgia-Pacific, LLC
Garry Griffith, Georgia-Pacific, LLC
Mark Brown, Ph.D., Waterviews, LLC

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Tables

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 1 - Previous Post-Excavation Confirmation Sampling and Soil Boring Data from R-2 and R-5 Areas
(Results are presented in parts per million, ppm)

Sample Delivery Group:		KAL 442						KAL 443
Location ID:	Part 201 Soil Direct Contact	EF-1	EF-2	ESW-1	ESW-2	ESW-3	ESW-4	EF-3
Date Collected:	Residential Commercial 1 Cleanup	04/08/08	04/08/08	04/08/08	04/08/08	04/08/08	04/09/08	04/17/08
Sample Depth (feet bgs):	Criteria	9	13-15	8	6	5	4	13-15
PCBs								
Aroclor 1016	--	ND(0.066)	ND(0.073)	ND(0.054)	ND(0.059)	ND(0.059)	ND(1.3)	ND(0.057)
Aroclor 1221	--	ND(0.066)	ND(0.073)	ND(0.054)	ND(0.059)	ND(0.059)	ND(1.3)	ND(0.057)
Aroclor 1232	--	ND(0.066)	ND(0.073)	ND(0.054)	ND(0.059)	ND(0.059)	ND(1.3)	ND(0.057)
Aroclor 1242	--	ND(0.066)	ND(0.073)	ND(0.054)	ND(0.059)	0.14	9.9	ND(0.057)
Aroclor 1248	--	ND(0.066)	ND(0.073)	ND(0.054)	ND(0.059)	ND(0.059)	2.9	ND(0.057)
Aroclor 1254	--	ND(0.066)	ND(0.073)	ND(0.054)	ND(0.059)	0.14	ND(1.3)	ND(0.057)
Aroclor 1260	--	ND(0.066)	ND(0.073)	ND(0.054)	0.13	0.11	ND(1.3)	ND(0.057)
Total PCBs	4	ND	ND	ND (See Note 16)	0.13	0.39	13 (See Note 17)	ND

See Notes on Page 4

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 1 - Previous Post-Excavation Confirmation Sampling and Soil Boring Data from R-2 and R-5 Areas
(Results are presented in parts per million, ppm)

Sample Delivery Group:		KAL 443						
Location ID:	Part 201 Soil Direct Contact	EF-4	EF-5	EF-6	EF-7	EF-8	EF-9	ESW-5
Date Collected:	Residential Commercial 1 Cleanup	04/17/08	04/18/08	04/18/08	04/21/08	04/23/08	04/23/08	04/18/08
Sample Depth (feet bgs):	Criteria	9	13	9	13-15	13	13	5
PCBs								
Aroclor 1016	--	ND(0.056)	ND(0.054)	ND(0.057)	ND(0.057)	ND(0.055)	ND(8.6)	ND(0.06)
Aroclor 1221	--	ND(0.056)	ND(0.054)	ND(0.057)	ND(0.057)	ND(0.055)	ND(8.6)	ND(0.06)
Aroclor 1232	--	ND(0.056)	ND(0.054)	ND(0.057)	ND(0.057)	ND(0.055)	ND(8.6)	ND(0.06)
Aroclor 1242	--	ND(0.056)	0.046 J	0.18	ND(0.057)	0.7	120	ND(0.06)
Aroclor 1248	--	ND(0.056)	ND(0.054)	0.044 J	ND(0.057)	ND(0.055)	ND(8.6)	0.17
Aroclor 1254	--	ND(0.056)	ND(0.054)	ND(0.057)	ND(0.057)	ND(0.055)	ND(8.6)	0.22
Aroclor 1260	--	ND(0.056)	ND(0.054)	ND(0.057)	ND(0.057)	0.029 J	ND(8.6)	0.19
Total PCBs	4	ND	0.046 J	0.22 J	ND (See Note 16)	0.73 J	120 (See Note 16)	0.58

See Notes on Page 4

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 1 - Previous Post-Excavation Confirmation Sampling and Soil Boring Data from R-2 and R-5 Areas
(Results are presented in parts per million, ppm)

Sample Delivery Group:		KAL 443		KAL 444	KAL 446			
Location ID:	Part 201 Soil Direct Contact	ESW-6	ESW-7	ESW-8	EF-10	ESW-9	SB-17	SB-18
Date Collected:	Residential Commercial 1 Cleanup	04/24/08	04/24/08	04/24/08	05/19/08	05/19/08	05/21/08	05/21/08
Sample Depth (feet bgs):	Criteria	5	11	6	10	4	4	4
PCBs								
Aroclor 1016	--	ND(0.057)	ND(0.054)	ND(0.19)	ND(0.064)	ND(0.055)	ND(0.057)	ND(0.61)
Aroclor 1221	--	ND(0.057)	ND(0.054)	ND(0.19)	ND(0.064)	ND(0.055)	ND(0.057)	ND(0.61)
Aroclor 1232	--	ND(0.057)	ND(0.054)	ND(0.19)	ND(0.064)	ND(0.055)	ND(0.057)	ND(0.61)
Aroclor 1242	--	ND(0.057)	ND(0.054)	2.4	ND(0.064)	ND(0.055)	ND(0.057)	8.8
Aroclor 1248	--	ND(0.057)	ND(0.054)	ND(0.19)	ND(0.064)	ND(0.055)	0.050 J	2.4
Aroclor 1254	--	ND(0.057)	ND(0.054)	0.14 J	ND(0.064)	0.047 J	0.051 J	ND(0.61)
Aroclor 1260	--	ND(0.057)	ND(0.054)	ND(0.19)	ND(0.064)	ND(0.055)	0.040 J	1.1
Total PCBs	4	ND	ND (See Note 16)	2.5 J (See Note 16)	ND	0.047 J	0.14 J	12 (See Note 17)

See Notes on Page 4

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 1 - Previous Post-Excavation Confirmation Sampling and Soil Boring Data from R-2 and R-5 Areas
(Results are presented in parts per million, ppm)

Sample Delivery Group:		KAL 447	KAL 448			KAL 449		
Location ID:	Part 201 Soil Direct Contact	R-5EF-1	R-5EF-2	R-5EF-3	R-5ESW-1	EF-11	ESW-10	ESW-11
Date Collected:	Residential Commercial 1 Cleanup	05/23/08	05/27/08	05/27/08	05/27/08	06/11/08	06/11/08	06/11/08
Sample Depth (feet bgs):	Criteria	9	10	8.5	5	6	3	3
PCBs								
Aroclor 1016	--	ND(0.069)	ND(0.07)	ND(0.065)	ND(0.054)	ND(0.059)	ND(0.06)	ND(0.068)
Aroclor 1221	--	ND(0.069)	ND(0.07)	ND(0.065)	ND(0.054)	ND(0.059)	ND(0.06)	ND(0.068)
Aroclor 1232	--	ND(0.069)	ND(0.07)	ND(0.065)	ND(0.054)	ND(0.059)	ND(0.06)	ND(0.068)
Aroclor 1242	--	ND(0.069)	ND(0.07)	ND(0.065)	ND(0.054)	ND(0.059)	ND(0.06)	ND(0.068)
Aroclor 1248	--	ND(0.069)	ND(0.07)	ND(0.065)	ND(0.054)	ND(0.059)	ND(0.06)	0.26
Aroclor 1254	--	ND(0.069)	ND(0.07)	ND(0.065)	ND(0.054)	0.089	ND(0.06)	0.2
Aroclor 1260	--	ND(0.069)	ND(0.07)	ND(0.065)	ND(0.054)	0.12	0.33	0.081
Total PCBs	4	ND	ND	ND	ND	0.21	0.33	0.54

Notes:
1. Samples were collected by ARCADIS and submitted to TestAmerica for PCB analysis.
2. ND - Analyte was not detected above the detection limit. The number in parenthesis is the associated detection limit.
3. J - Data qualifier indicates estimated value.
4. EF - Designates sample collected from excavation floor.
5. ESW - Designates sample collected from excavation side wall.
6. SB - Designates sample collected from soil boring.
7. Exceedences of corresponding regulatory limits are indicated by shading.
8. Sample Delivery Group (SDG) KAL 442 was received by the laboratory on April 12, 2008, and the complete analytical data package was received by ARCADIS on April 25, 2008.
9. SDG KAL 443 was received by the laboratory on April 26, 2008, and the complete analytical data package was received by ARCADIS on May 6, 2008.
10. SDG KAL 444 was received by the laboratory on May 3, 2008, and the complete analytical data package was received by ARCADIS by May 14, 2008.
11. SDG KAL 446 was received by the laboratory on May 21, 2008, and the complete analytical data package was received by ARCADIS on June 3, 2008.
12. SDG KAL 447 was received by the laboratory on May 24, 2008, and the complete analytical data package was received by ARCADIS on June 4, 2008.
13. SDG KAL 448 was received by the laboratory on May 30, 2008, and the complete analytical data package was received by ARCADIS on June 10, 2008.
14. SDG KAL 449 was received by the laboratory on June 12, 2008, and the complete analytical data package was received by ARCADIS on June 19, 2008.
15. SDG KAL 451 was received by the laboratory on August 16, 2008, and the complete analytical data package was received by ARCADIS on August 26, 2008.
16. Sample IDs EF-7, EF-9, ESW-1, ESW-7, and ESW-8 are located north of the site security fence (i.e., north of the property line) within Georgia-Pacific property.
17. Sample IDs ESW-4 and SB-18 were re-excavated on June 11, 2008.

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 2 - Additional Soil Boring Data Collected at R-2 Area
(Results are presented in parts per million, ppm)

Sample Delivery Group:	KAL 451									
Location ID:	SB-24	SB-25	SB-26	SB-27	SB-28	SB-29	SB-30	SB-31	SB-32	SB-33
Date Collected:	08/14/08	08/14/08	08/14/08	08/14/08	08/14/08	08/14/08	08/14/08	08/14/08	08/14/08	08/14/08
Sample Interval (feet bgs):	8-12	8-12	12-16	8-12	8-12	8-12	8-12	12-16	8-12	8-12
PCBs										
Aroclor 1016	ND(0.053)	ND(0.052)	ND(0.056)	ND(3.7)	ND(0.3)	ND(0.53)	ND(0.053)	ND(0.059)	ND(0.061)	ND(0.056)
Aroclor 1221	ND(0.053)	ND(0.052)	ND(0.056)	ND(3.7)	ND(0.3)	ND(0.53)	ND(0.053)	ND(0.059)	ND(0.061)	ND(0.056)
Aroclor 1232	ND(0.053)	ND(0.052)	ND(0.056)	ND(3.7)	ND(0.3)	ND(0.53)	ND(0.053)	ND(0.059)	ND(0.061)	ND(0.056)
Aroclor 1242	0.15	ND(0.052)	ND(0.056)	41	1.6	3.4	0.75	0.057 J	0.067	ND(0.056)
Aroclor 1248	0.099	0.13	ND(0.056)	3.8	0.51	ND(0.53)	ND(0.053)	ND(0.059)	ND(0.061)	ND(0.056)
Aroclor 1254	0.05 J	ND(0.052)	ND(0.056)	ND(3.7)	ND(0.3)	ND(0.53)	ND(0.053)	ND(0.059)	ND(0.061)	ND(0.056)
Aroclor 1260	0.077	0.037 J	ND(0.056)	ND(3.7)	ND(0.3)	ND(0.53)	ND(0.053)	ND(0.059)	ND(0.061)	ND(0.056)
Total PCBs	0.38 J	0.17 J	ND	45	2.1	3.4	0.75	0.057 J	0.067	ND

Notes:
1. Samples were collected by ARCADIS and submitted to TestAmerica for PCB analysis.
2. ND - Analyte was not detected above the detection limit. The number in parenthesis is the associated detection limit.
3. J - Data qualifier indicates estimated value.
4. SB - Designates sample collected from soil boring.
5. Within each depth interval, samples were biased towards collecting visible residuals or material suspected of containing elevated PCB concentrations, as concurred with by on-site MDEQ and/or CDM personnel.
6. Sample Delivery Group (SDG) KAL 451 was received by the laboratory on August 16, 2008, and the complete analytical data package was received by ARCADIS on August 26, 2008.

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 3 - PCB Characterization Sampling Data Collected at R-5 Area
(Results are presented in parts per million, ppm)

Sample Delivery Group:		KAL 448						KAL 451
Location ID:		R-5WW-A	R-5SW-A	R-5EW-A	R-5WW-GRID	R-5SW-GRID	R-5EW-GRID	R-5WW-COMP-(0-4)
Date Collected:	Toxic Substances Control Act	05/29/08	05/29/08	05/29/08	05/29/08	05/29/08	05/29/08	08/14/08
Sample Depth (feet bgs):	(TSCA) Regulatory Limit	7	4	4	0-8	0-8	0-6.5	0-4
PCBs								
Aroclor 1016	--	ND(7.1)	ND(1.5)	ND(6.6)	ND(0.56)	ND(0.11)	ND(0.27)	ND(0.17)
Aroclor 1221	--	ND(7.1)	ND(1.5)	ND(6.6)	ND(0.56)	ND(0.11)	ND(0.27)	ND(0.17)
Aroclor 1232	--	ND(7.1)	ND(1.5)	ND(6.6)	ND(0.56)	ND(0.11)	ND(0.27)	ND(0.17)
Aroclor 1242	--	68	22	58	5.1	ND(0.11)	2.8	ND(0.17)
Aroclor 1248	--	19	6.3	ND(6.6)	0.82	1.1	0.93	0.75
Aroclor 1254	--	ND(7.1)	ND(1.5)	3.5 J	ND(0.56)	ND(0.11)	ND(0.27)	ND(0.17)
Aroclor 1260	--	ND(7.1)	ND(1.5)	ND(6.6)	ND(0.56)	0.085 J	ND(0.27)	ND(0.17)
Total PCBs	50	87	28	62 J	5.9	1.2 J	3.7	0.75

See Notes on Page 3

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 3 - PCB Characterization Sampling Data Collected at R-5 Area
(Results are presented in parts per million, ppm)

Sample Delivery Group:		KAL 451				
Location ID:	Toxic Substances Control	R-5WW-COMP-(4-8)	R-5WW-COMP-(0-10)	R-5SW-COMP-(0-4)	R-5SW-COMP-(4-8)	R-5SW-COMP-(0-10)
Date Collected:	Act (TSCA) Regulatory	08/14/08	08/14/08	08/14/08	08/14/08	08/14/08
Sample Depth (feet bgs):	Limit	4-8	0-10	0-4	4-8	0-10
PCBs						
Aroclor 1016	--	ND(1.2)	ND(1.2)	ND(0.055)	ND(0.054)	ND(0.056)
Aroclor 1221	--	ND(1.2)	ND(1.2)	ND(0.055)	ND(0.054)	ND(0.056)
Aroclor 1232	--	ND(1.2)	ND(1.2)	ND(0.055)	ND(0.054)	ND(0.056)
Aroclor 1242	--	14	16	ND(0.055)	ND(0.054)	0.13
Aroclor 1248	--	3.1	2.1	ND(0.055)	0.08	0.064
Aroclor 1254	--	ND(1.2)	ND(1.2)	ND(0.055)	ND(0.054)	ND(0.056)
Aroclor 1260	--	0.71 J	ND(1.2)	ND(0.055)	0.029 J	0.032 J
Total PCBs	50	18 J	18	ND	0.11 J	0.23 J

See Notes on Page 3

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 3 - PCB Characterization Sampling Data Collected at R-5 Area
(Results are presented in parts per million, ppm)

Sample Delivery Group:		KAL 451		
Location ID:		R-5EW-COMP-(0-4)	R-5EW-COMP-(4-8)	R-5EW-COMP-(0-10)
Date Collected:	Toxic Substances Control Act	08/14/08	08/14/08	08/14/08
Sample Depth (feet bgs):	(TSCA) Regulatory Limit	0-4	4-8	0-10
PCBs				
Aroclor 1016	--	ND(0.31)	ND(1.2)	ND(2.9)
Aroclor 1221	--	ND(0.31)	ND(1.2)	ND(2.9)
Aroclor 1232	--	ND(0.31)	ND(1.2)	ND(2.9)
Aroclor 1242	--	1.4	9	10
Aroclor 1248	--	1.5	3.6	3.4
Aroclor 1254	--	ND(0.31)	ND(1.2)	ND(2.9)
Aroclor 1260	--	ND(0.31)	ND(1.2)	ND(2.9)
Total PCBs	50	2.9	13	13

Notes:
1. Samples were collected by ARCADIS and submitted to TestAmerica for PCB analysis.
2. ND - Analyte was not detected above the detection limit. The number in parenthesis is the associated detection limit.
3. J - Data qualifier indicates estimated value.
4. Exceedences of corresponding regulatory limits are indicated by shading.
5. WW - Designates sample collected from excavation western side wall.
6. SW - Designates sample collected from excavation southern side wall.
7. EW - Designates sample collected from excavation eastern side wall.
8. (0-4), (4-8), (0-10) - Designates composite sample grid depth interval.
9. Sample Delivery Group (SDG) KAL 448 was received by the laboratory on May 30, 2008, and the complete analytical data package was received by ARCADIS on June 10, 2008.
10. SDG KAL 451 was received by the laboratory on August 16, 2008, and the complete analytical data package was received by ARCADIS on August 26, 2008.

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 4 - Test Pit Sampling Data
(Results are presented in parts per million, ppm)

Sample Delivery Group:	KAL 454							
Location ID:	TP-7-1	TP-7-2	TP-7-3	TP-7-COMP	TP-8	TP-9-1	TP-9-2	TP-9-3
Date Collected:	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08
Sample Depth (feet bgs):	9-10	5.5	5.5	--	5	3	3.5	10
PCBs								
Aroclor 1016	ND(0.065)	ND(1.8)	ND(0.066)	ND(0.057)	ND(0.06)	ND(0.56)	ND(0.68)	ND(0.054)
Aroclor 1221	ND(0.065)	ND(1.8)	ND(0.066)	ND(0.057)	ND(0.06)	ND(0.56)	ND(0.68)	ND(0.054)
Aroclor 1232	ND(0.065)	ND(1.8)	ND(0.066)	ND(0.057)	ND(0.06)	ND(0.56)	ND(0.68)	ND(0.054)
Aroclor 1242	ND(0.065)	13	ND(0.066)	ND(0.057)	ND(0.06)	5.5	63	0.069
Aroclor 1248	ND(0.065)	ND(1.8)	ND(0.066)	0.084	ND(0.06)	1.5	ND(0.68)	ND(0.054)
Aroclor 1254	ND(0.065)	0.95 J	ND(0.066)	ND(0.057)	ND(0.06)	ND(0.56)	ND(0.68)	ND(0.054)
Aroclor 1260	ND(0.065)	ND(1.8)	ND(0.066)	ND(0.057)	ND(0.06)	ND(0.56)	ND(0.68)	ND(0.054)
Total PCBs	ND	14 J	ND	0.084	ND	7	63	0.069

Notes:
1. Samples were collected by ARCADIS and submitted to TestAmerica for PCB analysis.
2. ND - Analyte was not detected above the detection limit. The number in parenthesis is the associated detection limit.
3. J - Data qualifier indicates estimated value.
4. With the exception of Location ID TP-7-COMP, samples were biased towards collecting visible residuals or material suspected of containing elevated PCB concentrations, as concurred with by on-site CDM personnel.
5. TP - Designates sample collected from test pit.
6. Sample Delivery Group KAL 454 was received by the laboratory on September 19, 2008, and the complete analytical data package was received by ARCADIS on September 29, 2008.

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 5 - Additional Soil Boring Data Collected at R-5 Area
(Results are presented in parts per million, ppm)

Sample Delivery Group:	KAL 452									
Location ID:	SB-34(0-4)	SB-34(4-8)	SB-34(8-12)	SB-35(0-4)	SB-35(4-8)	SB-35(8-12)	SB-36(0-4)	SB-36(4-8)	SB-36(8-12)	SB-37(0-4)
Date Collected:	09/17/08	09/17/08	09/17/08	09/17/08	09/17/08	09/17/08	09/17/08	09/17/08	09/17/08	09/17/08
Sample Interval (feet bgs):	0-4	4-8	8-12	0-4	4-8	8-12	0-4	4-8	8-12	0-4
PCBs										
Aroclor 1016	ND(0.061)	ND(0.57)	ND(0.057)	ND(0.055)	ND(0.055)	ND(0.061)	ND(0.11)	ND(0.27)	ND(0.066)	ND(0.053)
Aroclor 1221	ND(0.061)	ND(0.57)	ND(0.057)	ND(0.055)	ND(0.055)	ND(0.061)	ND(0.11)	ND(0.27)	ND(0.066)	ND(0.053)
Aroclor 1232	ND(0.061)	ND(0.57)	ND(0.057)	ND(0.055)	ND(0.055)	ND(0.061)	ND(0.11)	ND(0.27)	ND(0.066)	ND(0.053)
Aroclor 1242	ND(0.061)	4.8	ND(0.057)	ND(0.055)	6.6	ND(0.061)	ND(0.11)	1.7	ND(0.066)	ND(0.053)
Aroclor 1248	0.12	2	ND(0.057)	0.22	0.74	ND(0.061)	1.5	0.71	ND(0.066)	ND(0.053)
Aroclor 1254	0.11	ND(0.57)	ND(0.057)	ND(0.055)	ND(0.055)	ND(0.061)	ND(0.11)	ND(0.27)	ND(0.066)	ND(0.053)
Aroclor 1260	0.042 J	ND(0.57)	ND(0.057)	ND(0.055)	ND(0.055)	ND(0.061)	0.15	ND(0.27)	ND(0.066)	0.08
Total PCBs	0.27 J	6.8	ND	0.22	7.3	ND	1.7	2.4	ND	0.08

See Notes on Page 6

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 5 - Additional Soil Boring Data Collected at R-5 Area
(Results are presented in parts per million, ppm)

Sample Delivery Group:	KAL 452									
Location ID:	SB-37(4-8)	SB-37(8-12)	SB-38(0-4)	SB-38(4-6)	SB-38(6-8)	SB-38(8-12)	SB-39(0-4)	SB-39(4-8)	SB-39(8-12)	SB-40(0-4)
Date Collected:	09/17/08	09/17/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08
Sample Interval (feet bgs):	4-8	8-12	0-4	4-6	6-8	8-12	0-4	4-8	8-12	0-4
PCBs										
Aroclor 1016	ND(0.056)	ND(0.062)	ND(0.057)	ND(6.8)	ND(3.2)	ND(0.074)	ND(0.054)	ND(0.06)	ND(0.068)	ND(0.056)
Aroclor 1221	ND(0.056)	ND(0.062)	ND(0.057)	ND(6.8)	ND(3.2)	ND(0.074)	ND(0.054)	ND(0.06)	ND(0.068)	ND(0.056)
Aroclor 1232	ND(0.056)	ND(0.062)	ND(0.057)	ND(6.8)	ND(3.2)	ND(0.074)	ND(0.054)	ND(0.06)	ND(0.068)	ND(0.056)
Aroclor 1242	ND(0.056)	ND(0.062)	0.27	70	47	0.09	ND(0.054)	ND(0.06)	ND(0.068)	ND(0.056)
Aroclor 1248	ND(0.056)	ND(0.062)	ND(0.057)	ND(6.8)	ND(3.2)	ND(0.074)	ND(0.054)	ND(0.06)	ND(0.068)	ND(0.056)
Aroclor 1254	ND(0.056)	ND(0.062)	0.52	ND(6.8)	ND(3.2)	ND(0.074)	0.033 J	ND(0.06)	ND(0.068)	0.26
Aroclor 1260	0.035 J	ND(0.062)	0.16	ND(6.8)	ND(3.2)	ND(0.074)	ND(0.054)	0.077	ND(0.068)	0.46
Total PCBs	0.035 J	ND	0.95	70	47	0.09	0.033 J	0.077	ND	0.72

See Notes on Page 6

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 5 - Additional Soil Boring Data Collected at R-5 Area
(Results are presented in parts per million, ppm)

Sample Delivery Group:	KAL 453									
Location ID:	SB-40(4-8)	SB-40(8-12)	SB-41(0-4)	SB-41(4-8)	SB-41(8-12)	SB-42(0-4)	SB-42(4-8)	SB-42(8-12)	SB-43(0-4)	SB-43(4-8)
Date Collected:	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08
Sample Interval (feet bgs):	4-8	8-12	0-4	4-8	8-12	0-4	4-8	8-12	0-4	4-8
PCBs										
Aroclor 1016	ND(0.057)	ND(0.068)	ND(1.2)	ND(0.057)	ND(0.062)	ND(1.1)	ND(1.8)	ND(0.055)	ND(0.057)	ND(0.053)
Aroclor 1221	ND(0.057)	ND(0.068)	ND(1.2)	ND(0.057)	ND(0.062)	ND(1.1)	ND(1.8)	ND(0.055)	ND(0.057)	ND(0.053)
Aroclor 1232	ND(0.057)	ND(0.068)	ND(1.2)	ND(0.057)	ND(0.062)	ND(1.1)	ND(1.8)	ND(0.055)	ND(0.057)	ND(0.053)
Aroclor 1242	ND(0.057)	ND(0.068)	19	ND(0.057)	ND(0.062)	ND(1.1)	27	ND(0.055)	ND(0.057)	ND(0.053)
Aroclor 1248	ND(0.057)	ND(0.068)	ND(1.2)	ND(0.057)	ND(0.062)	1.3	ND(1.8)	ND(0.055)	7.1	ND(0.053)
Aroclor 1254	ND(0.057)	ND(0.068)	ND(1.2)	ND(0.057)	ND(0.062)	ND(1.1)	ND(1.8)	ND(0.055)	ND(0.057)	ND(0.053)
Aroclor 1260	ND(0.057)	ND(0.068)	ND(1.2)	ND(0.057)	ND(0.062)	0.099 J	ND(1.8)	ND(0.055)	0.62	ND(0.053)
Total PCBs	ND	ND	19	ND	ND	1.4 J	27	ND	7.7	ND

See Notes on Page 6

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 5 - Additional Soil Boring Data Collected at R-5 Area
(Results are presented in parts per million, ppm)

Sample Delivery Group:	KAL 453									
Location ID:	SB-43(8-12)	SB-44(0-4)	SB-44(4-8)	SB-44(8-12)	SB-45(0-4)	SB-45(4-8)	SB-45(8-12)	SB-46(0-4)	SB-46(4-8)	SB-46(8-12)
Date Collected:	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08	09/18/08
Sample Interval (feet bgs):	8-12	0-4	4-8	8-12	0-4	4-8	8-12	0-4	4-8	8-12
PCBs										
Aroclor 1016	ND(0.055)	ND(0.053)	ND(2.6)	ND(1.1)	ND(0.054)	ND(0.055)	ND(0.059)	ND(0.052)	ND(0.054)	ND(0.058)
Aroclor 1221	ND(0.055)	ND(0.053)	ND(2.6)	ND(1.1)	ND(0.054)	ND(0.055)	ND(0.059)	ND(0.052)	ND(0.054)	ND(0.058)
Aroclor 1232	ND(0.055)	ND(0.053)	ND(2.6)	ND(1.1)	ND(0.054)	ND(0.055)	ND(0.059)	ND(0.052)	ND(0.054)	ND(0.058)
Aroclor 1242	ND(0.055)	ND(0.053)	2.2	0.98	ND(0.054)	ND(0.055)	ND(0.059)	ND(0.052)	ND(0.054)	0.1
Aroclor 1248	ND(0.055)	ND(0.053)	ND(2.6)	0.19	ND(0.054)	ND(0.055)	ND(0.059)	ND(0.052)	ND(0.054)	ND(0.058)
Aroclor 1254	ND(0.055)	ND(0.053)	ND(2.6)	ND(1.1)	ND(0.054)	ND(0.055)	ND(0.059)	0.055	ND(0.054)	0.37
Aroclor 1260	ND(0.055)	ND(0.053)	ND(2.6)	ND(1.1)	ND(0.054)	ND(0.055)	ND(0.059)	0.075	0.04 J	ND(0.058)
Total PCBs	ND	ND	2.2	1.2	ND	ND	ND	0.13	0.04 J	0.47

See Notes on Page 6

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

Table 5 - Additional Soil Boring Data Collected at R-5 Area
(Results are presented in parts per million, ppm)

Sample Delivery Group:	KAL 455									
Location ID:	SB-47(0-4)	SB-47(4-8)	SB-47(8-12)	SB-48 (0-4)	SB-48 (4-8)	SB-48 (8-12)	SB-49(0-4)	SB-49(4-8)	SB-49(8-12)	SB-50(0-4)
Date Collected:	09/26/08	09/26/08	09/26/08	09/26/08	09/26/08	09/26/08	09/26/08	09/26/08	09/26/08	09/26/08
Sample Interval (feet bgs):	0-4	4-8	8-12	0-4	4-8	8-12	0-4	4-8	8-12	0-4
PCBs										
Aroclor 1016	ND [0.055]	ND [0.054]	ND [0.055]	ND [0.053]	ND [0.054]	ND [0.054]	ND [0.053]	ND [0.054]	ND [0.063]	ND [0.053]
Aroclor 1221	ND [0.055]	ND [0.054]	ND [0.055]	ND [0.053]	ND [0.054]	ND [0.054]	ND [0.053]	ND [0.054]	ND [0.063]	ND [0.053]
Aroclor 1232	ND [0.055]	ND [0.054]	ND [0.055]	ND [0.053]	ND [0.054]	ND [0.054]	ND [0.053]	ND [0.054]	ND [0.063]	ND [0.053]
Aroclor 1242	ND [0.055]	ND [0.054]	ND [0.055]	ND [0.053]	ND [0.054]	ND [0.054]	ND [0.053]	ND [0.054]	ND [0.063]	ND [0.053]
Aroclor 1248	ND [0.055]	ND [0.054]	ND [0.055]	ND [0.053]	ND [0.054]	ND [0.054]	ND [0.053]	ND [0.054]	ND [0.063]	ND [0.053]
Aroclor 1254	ND [0.055]	ND [0.054]	ND [0.055]	ND [0.053]	ND [0.054]	ND [0.054]	ND [0.053]	ND [0.054]	ND [0.063]	ND [0.053]
Aroclor 1260	ND [0.055]	ND [0.054]	ND [0.055]	ND [0.053]	ND [0.054]	ND [0.054]	0.13	ND [0.054]	ND [0.063]	0.03 J
Total PCBs	ND	ND	ND	ND	ND	ND	0.13	ND	ND	0.03 J

See Notes on Page 6

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
King Highway Landfill Operable Unit

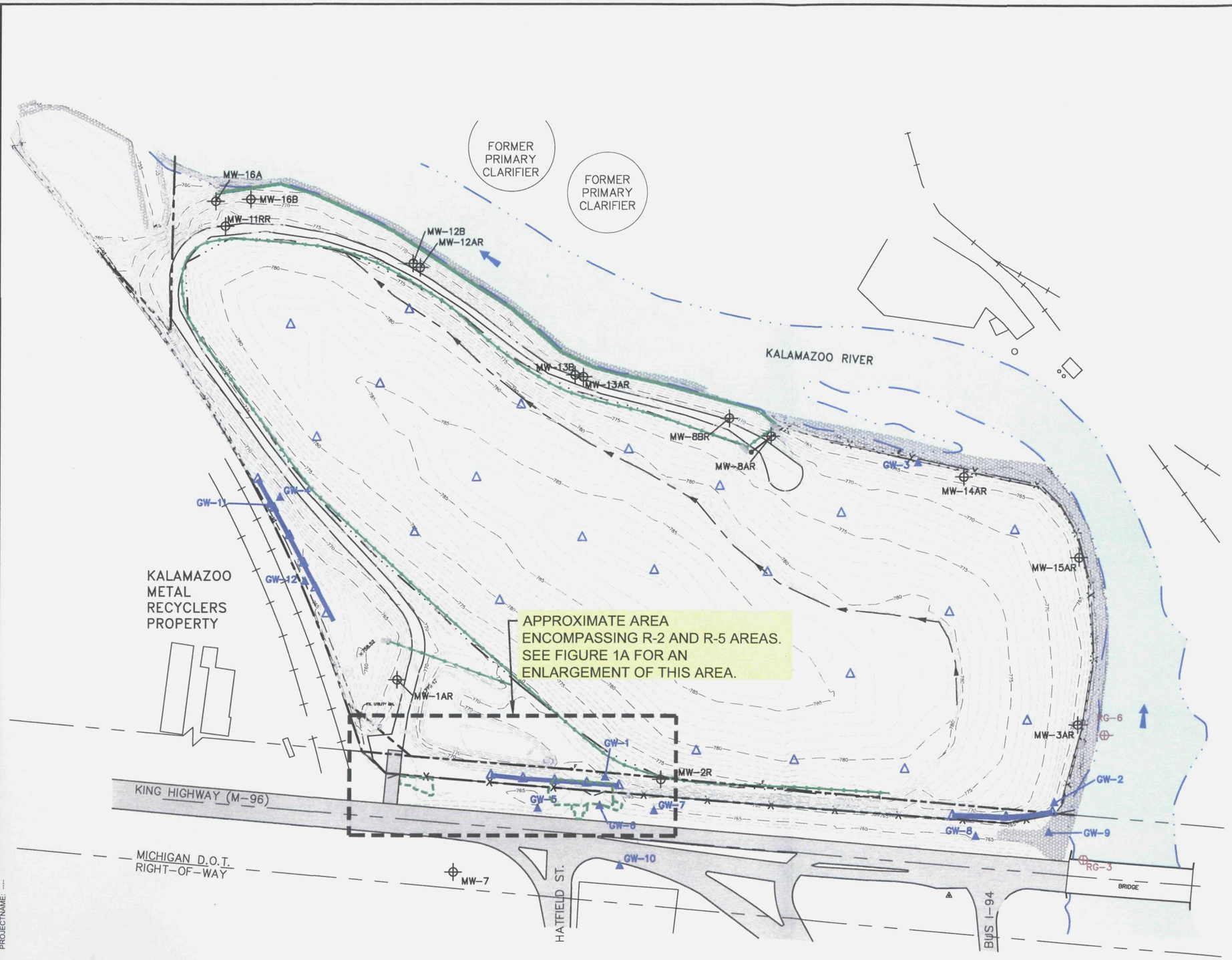
Table 5 - Additional Soil Boring Data Collected at R-5 Area
(Results are presented in parts per million, ppm)

Sample Delivery Group:	KAL 455	
Location ID:	SB-50(4-8)	SB-50(8-12)
Date Collected:	09/26/08	09/26/08
Sample Interval (feet bgs):	4-8	8-12
PCBs		
Aroclor 1016	ND [0.054]	ND [0.075]
Aroclor 1221	ND [0.054]	ND [0.075]
Aroclor 1232	ND [0.054]	ND [0.075]
Aroclor 1242	ND [0.054]	ND [0.075]
Aroclor 1248	ND [0.054]	ND [0.075]
Aroclor 1254	ND [0.054]	ND [0.075]
Aroclor 1260	ND [0.054]	ND [0.075]
Total PCBs	ND	ND

Notes:
1. Samples were collected by ARCADIS and submitted to TestAmerica for PCB analysis.
2. ND - Analyte was not detected above the detection limit. The number in parenthesis is the associated detection limit.
3. J - Data qualifier indicates estimated value.
4. SB - Designates sample collected from soil boring.
5. Within each depth interval, samples were biased towards collecting visible residuals or material suspected of containing elevated PCB concentrations, as concurred with by on-site MDEQ and/or CDM personnel.
6. Sample Delivery Group (SDG) KAL 451 was received by the laboratory on August 16, 2008, and the complete analytical data package was received by ARCADIS on August 26, 2008.
7. SDG KAL 452 was received by the laboratory on September 19, 2008, and the complete analytical data package was received by ARCADIS on September 29, 2008.
8. SDG KAL 453 was received by the laboratory on September 19, 2008, and the complete analytical data package was received by ARCADIS on October 3, 2008.
9. SDG KAL 455 was received by the laboratory on September 27, 2008, and the complete analytical data package was received by ARCADIS on October 3, 2008.

ARCADIS

Figures



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- DITCH LINE
- ABANDONED RAILROAD
- SHEETPILE WALL
- RIPRAP
- CULVERT PIPE
- FINAL AS-BUILT INDEX CONTOUR
- FINAL AS-BUILT INTERMEDIATE CONTOUR
- SECURITY FENCE
- PORE WATER COLLECTION PIPE
- PORE WATER DRAIN
- APPROXIMATE WATER EDGE
- FLOW DIRECTION OF RIVER
- MW-14AR — MONITORING WELL
- RG-3 — RIVER GAUGE STATION
- GW-2 — GAS MONITORING PROBES
- GAS VENTS
- LANDFILL GAS CUTOFF TRENCH
- AS-BUILT EXCAVATION LIMITS

NOTES:

1. BASE MAP INFORMATION OBTAINED FROM CADD DRAWING FILE DEVELOPED BY RMT, INC., ANN ARBOR, MICHIGAN (CADD FILE: L1630SU01.DWG AS-BUILT SURVEY; 8/21/00).
2. FINAL AS-BUILT CONTOUR ELEVATIONS ARE SHOWN AND ARE BASED ON A FIELD SURVEY BY ATWELL-HICKS, INC., DATED 9/27/00 WITH REVISIONS DATED 10/23/00, 12/21/01, 12/10/02, AND 7/24/03.
3. FINAL AS-BUILT CONTOUR ELEVATIONS OF SEDIMENTATION BASIN ARE BASED ON A FIELD SURVEY BY PREIN-NEWHOF, DATED 2/3/04.
4. ELEVATIONS ARE BASED ON NGVD OF 1929 (MSL).
5. ORIGINAL PROPERTY SURVEY PERFORMED BY WILKINS & WHEATON ENGINEERING CO., INC., ON 7/1/96. ADDITIONAL PROPERTY SURVEY PERFORMED BY PREIN & NEWHOF ON APRIL 11, 2003, OCTOBER 5, 2004, AND AUGUST 18, 2007.
6. TOPOGRAPHIC CONTOUR INTERVAL IS 1 FOOT.
7. AS-BUILT EXCAVATION LIMITS HEREON ARE APPROXIMATE.

0 160' 320'

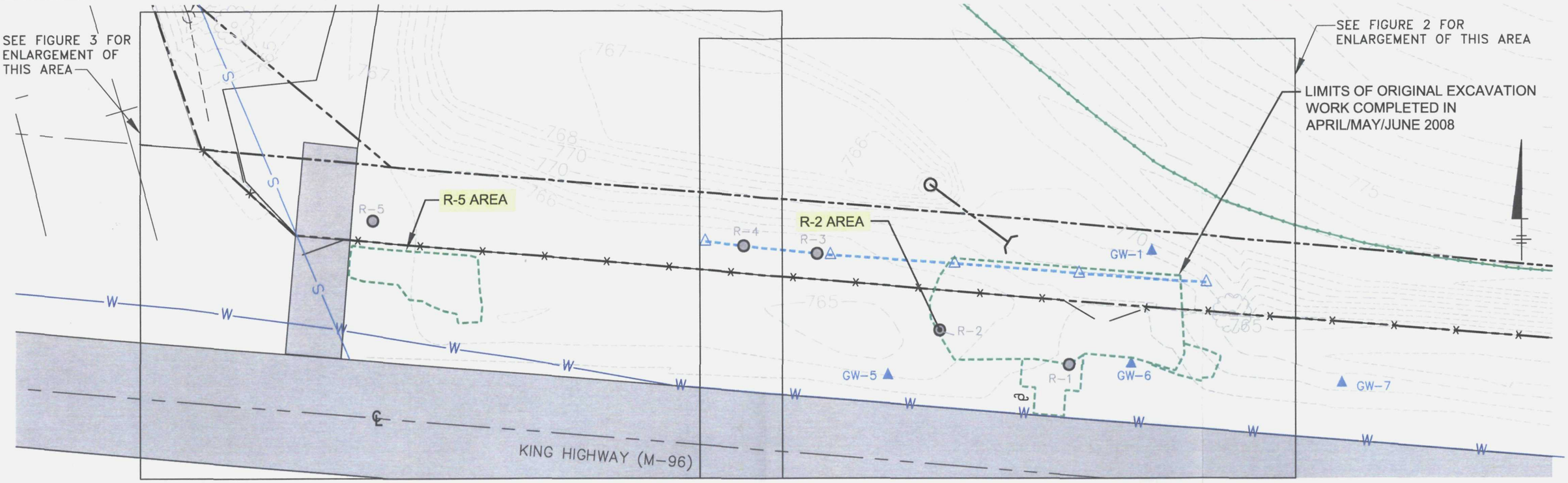
KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
KING HIGHWAY LANDFILL

KHL SITE PLAN - R-2 & R-5 AREAS

ARCADIS

FIGURE 1

CITY: SYRACUSE-NY DIV/GROUP:141 DB: AGS KFS KMD LD: PIC: BD PM: MH TM:MH LYR: ON=*;OFF=*REF*
G:\CADACT\B0064583\0000\00675\DWG\AS-BUILT\SURVEY\64583G10.DWG LAYOUT: 1 SAVED: 10/24/2008 5:04 PM ACADVER: 17.0S (LMS TECH) PAGESETUP: C-LB-PDF PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 10/29/2008 1:02 PM BY: SCHILLING, ADAM
XREFS:
64583X01
64583X00
IMAGES:
PROJECTNAME: ---



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- DITCH LINE
- CULVERT PIPE
- 770 — FINAL AS-BUILT INDEX CONTOUR
- FINAL AS-BUILT INTERMEDIATE CONTOUR
- SECURITY FENCE
- PORE WATER COLLECTION PIPE
- GW-2 ▲ GAS MONITORING PROBE
- V-2-2 △ GAS VENT
- S — APPROXIMATE LOCATION OF 72-INCH-DIAMETER CITY SANITARY SEWER LINE (SEE NOTE 8)
- W — APPROXIMATE LOCATION OF CITY WATER LINE (SEE NOTE 9)
- AS-BUILT EXCAVATION LIMITS
- R-2 ◉ RESIDUALS OBSERVED AT/BEYOND EXCAVATION LIMITS
- AS-BUILT CUTOFF TRENCH LOCATION

BASE MAP NOTES:

1. BASE MAP INFORMATION OBTAINED FROM CADD DRAWING FILE DEVELOPED BY RMT, INC., ANN ARBOR, MICHIGAN (CADD FILE: L1630SU01.DWG AS-BUILT SURVEY; 8/21/00).
2. FINAL AS-BUILT CONTOUR ELEVATIONS ARE SHOWN AND ARE BASED ON A FIELD SURVEY BY ATWELL-HICKS, INC., DATED 9/27/00 WITH REVISIONS DATED 10/23/00, 12/21/01, 12/10/02, AND 7/24/03.
3. FINAL AS-BUILT CONTOUR ELEVATIONS OF SEDIMENTATION BASIN ARE BASED ON A FIELD SURVEY BY PREIN-NEWHOF, DATED 2/3/04.
4. ELEVATIONS ARE BASED ON NGVD OF 1929 (MSL).
5. ORIGINAL PROPERTY SURVEY PERFORMED BY WILKINS & WHEATON ENGINEERING CO., INC., ON 7/1/96. ADDITIONAL PROPERTY SURVEY PERFORMED BY PREIN & NEWHOF ON APRIL 11, 2003, OCTOBER 5, 2004, AND AUGUST 18, 2007.
6. TOPOGRAPHIC CONTOUR INTERVAL IS 1 FOOT.
7. AS-BUILT EXCAVATION LIMITS AND AS-BUILT CUTOFF TRENCH LOCATION ARE BASED ON MULTIPLE FIELD SURVEYS CONDUCTED BY TERRA CONTRACTING, LLC IN APRIL, MAY, AND JUNE 2008.
8. APPROXIMATE LOCATION OF EXISTING 72-INCH-DIAMETER SANITARY SEWER LINE IS INFERRED BASED ON INFORMATION PROVIDED BY THE CITY OF KALAMAZOO. PER CITY OF KALAMAZOO, NO AS-BUILT SURVEY INFORMATION IS AVAILABLE FOR THIS LINE.
9. APPROXIMATE LOCATION OF EXISTING WATER LINE WAS FIELD MARKED BY THE CITY OF KALAMAZOO, AND SURVEYED BY PREIN & NEWHOF IN SEPTEMBER 2008.

0 40' 80'

GRAPHIC SCALE

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
KING HIGHWAY LANDFILL

KHL SITE PLAN - R-2 & R-5 AREAS

ARCADIS

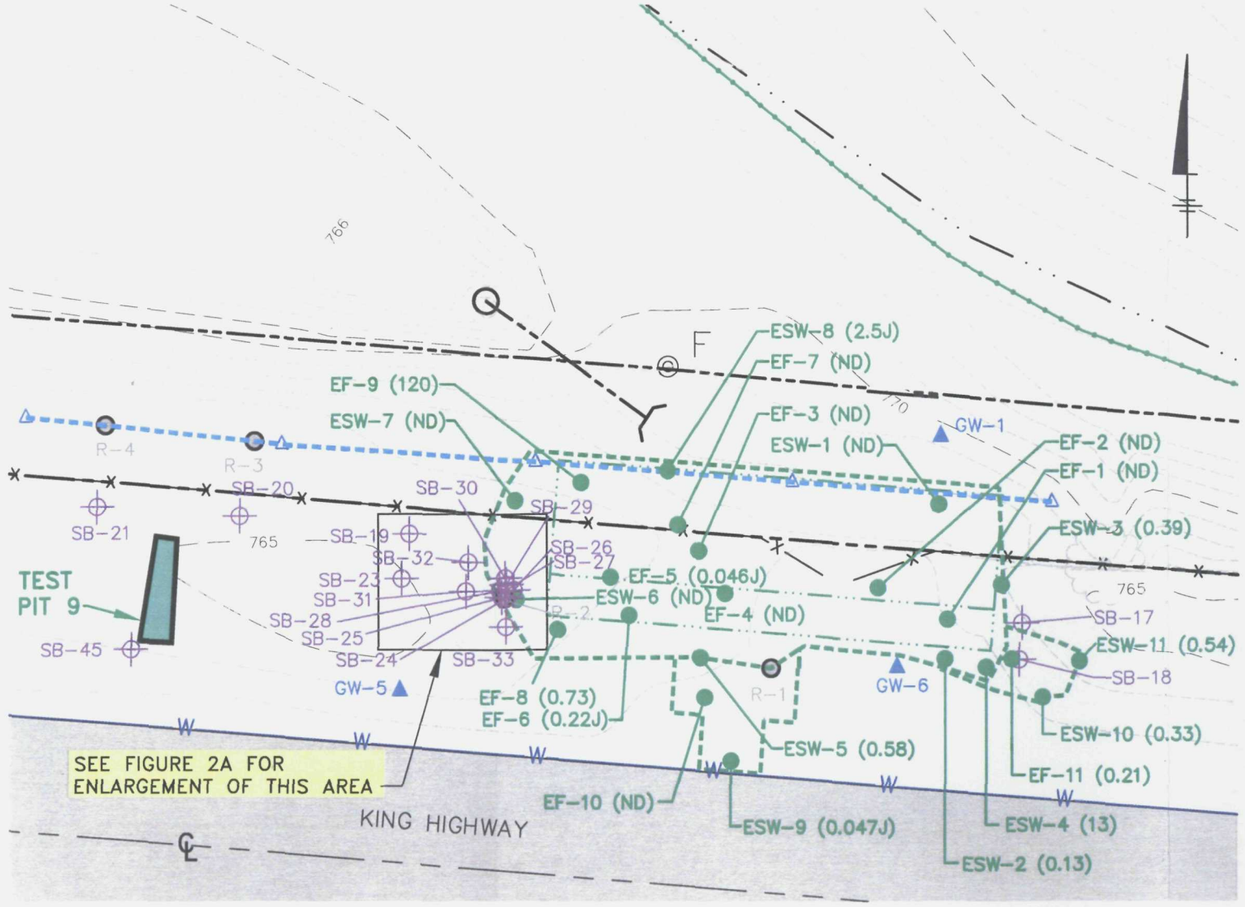
FIGURE
1A

CITY: SYRACUSE,NY DIV/GROUP:141 DB: AGS KFS KMD LD: PIC: B. DESHIELDS PM: M. HASSETT TM: M. HASSETT LYR: ON=*;OFF=*REF_IEX_GRAVEL_IEX_STORM_ISURV-IRON
G:\CAD\ACTIVE\60845830\000\00875\DWG\AS-BUILT\SURVEY\64583G12.DWG LAYOUT: 1A SAVED: 10/24/2008 5:09 PM ACADVER: 17.0S (LMS TECH) PAGESETUP:--- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 10/29/2008 3:15 PM BY: RITSCHEL, TIMOTHY
XREFS: IMAGES: PROJECTNAME: ---
64583X01
64583X00

LOCATION	DEPTH (FT BGS)	DESCRIPTION
R–1	2–8	SOUTHERN SIDEWALL OF EXCAVATION
R–2	12–13	WESTERN SIDEWALL OF EXCAVATION
R–3	~10	FLOOR OF TRENCH
R–4	~10	FLOOR OF TRENCH
ESW–1	8	SOUTHERN SIDEWALL OF TRENCH
ESW–2	6	SOUTHERN SIDEWALL OF EXCAVATION
ESW–3	5	EASTERN SIDEWALL OF EXCAVATION
ESW–4	4	SOUTHEASTERN SIDEWALL (CORNER) OF EXCAVATION
ESW–5	5	SOUTHERN SIDEWALL OF EXCAVATION
ESW–6	5	WESTERN SIDEWALL OF EXCAVATION
ESW–7	11	WESTERN SIDEWALL OF EXCAVATION
ESW–8	6	NORTHERN SIDEWALL OF EXCAVATION
ESW–9	4	SOUTHERN SIDEWALL OF EXCAVATION
ESW–10	3	EASTERN SIDEWALL OF EXCAVATION
ESW–11	3	EASTERN SIDEWALL OF EXCAVATION
EF–1	9	FLOOR OF EXCAVATION
EF–2	13–15	FLOOR OF EXCAVATION
EF–3	13–15	FLOOR OF EXCAVATION
EF–4	9	FLOOR OF EXCAVATION
EF–5	13	FLOOR OF EXCAVATION
EF–6	9	FLOOR OF EXCAVATION
EF–7	13–15	FLOOR OF EXCAVATION
EF–8	13	FLOOR OF EXCAVATION
EF–9	13	FLOOR OF EXCAVATION
EF–10	10	FLOOR OF EXCAVATION
EF–11	6	FLOOR OF EXCAVATION

NOTE:

LOCATIONS ARE BASED ON MULTIPLE FIELD SURVEYS CONDUCTED BY TERRA CONTRACTING, LLC IN APRIL, MAY, AND JUNE 2008. HOWEVER, CERTAIN LOCATIONS ARE APPROXIMATE DUE TO ACCESS LIMITATIONS.



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- CULVERT PIPE
- 770 — FINAL AS–BUILT INDEX CONTOUR
- FINAL AS–BUILT INTERMEDIATE CONTOUR
- X — SECURITY FENCE
- PORE WATER COLLECTION PIPE
- GW–2 ▲ GAS MONITORING PROBE
- △ GAS VENT
- AS–BUILT CUTOFF TRENCH LOCATION
- PRE–DEFINED EXCAVATION LIMITS PRESENTED IN APRIL 3, 2008 WORK PLAN
- AS–BUILT EXCAVATION LIMITS
- W — APPROXIMATE LOCATION OF CITY WATER LINE (SEE NOTE 8)
- R–1 ○ RESIDUALS OBSERVED AT/BEYOND EXCAVATION LIMITS
- ESW–1 (ND) ● POST–EXCAVATION SIDEWALL CONFIRMATION SAMPLE LOCATION (PCB RESULTS IN PPM)
- EF–1 (ND) ● POST–EXCAVATION FLOOR CONFIRMATION SAMPLE LOCATION (PCB RESULTS IN PPM)
- SB–19 ⊕ SOIL BORING (SEE NOTES 9–11)
- TEST PIT (SEE NOTE 12)

BASE MAP NOTES:

1. BASE MAP INFORMATION OBTAINED FROM CADD DRAWING FILE DEVELOPED BY RMT, INC., ANN ARBOR, MICHIGAN (CADD FILE: L1630SU01.DWG AS–BUILT SURVEY; 8/21/00).
2. FINAL AS–BUILT CONTOUR ELEVATIONS ARE SHOWN AND ARE BASED ON A FIELD SURVEY BY ATWELL–HICKS, INC., DATED 9/27/00 WITH REVISIONS DATED 10/23/00, 12/21/01, 12/10/02, AND 7/24/03.
3. FINAL AS–BUILT CONTOUR ELEVATIONS OF SEDIMENTATION BASIN ARE BASED ON A FIELD SURVEY BY PREIN–NEWHOF, DATED 2/3/04.
4. ELEVATIONS ARE BASED ON NGVD OF 1929 (MSL).
5. ORIGINAL PROPERTY SURVEY PERFORMED BY WILKINS & WHEATON ENGINEERING CO., INC., ON 7/1/96. ADDITIONAL PROPERTY SURVEY PERFORMED BY PREIN & NEWHOF ON APRIL 11, 2003, OCTOBER 5, 2004, AND AUGUST 18, 2007.
6. TOPOGRAPHIC CONTOUR INTERVAL IS 1 FOOT.
7. AS–BUILT EXCAVATION LIMITS AND AS–BUILT CUTOFF TRENCH LOCATION ARE BASED ON MULTIPLE FIELD SURVEYS CONDUCTED BY TERRA CONTRACTING, LLC IN APRIL, MAY, AND JUNE 2008.
8. APPROXIMATE LOCATION OF EXISTING WATER LINE WAS FIELD MARKED BY THE CITY OF KALAMAZOO, AND SURVEYED BY PREIN & NEWHOF IN SEPTEMBER 2008
9. SOIL BORINGS SB–17 THROUGH SB–23 WERE ADVANCED ON MAY 21, 2008 WITH CDM PRESENT. SAMPLES WERE COLLECTED FROM SOIL BORINGS SB–17 AND SB–18 AT APPROXIMATELY 4 FT BGS AND ANALYZED FOR TOTAL PCBs. SOIL BORINGS SB–19 THROUGH SB–23 WERE VISUALLY OBSERVED FOR THE PRESENCE OF RESIDUALS. NO RESIDUALS WERE OBSERVED WITHIN ANY OF THE SEVEN SOIL BORINGS THAT MERITED ADVANCING ADDITIONAL DELINEATION SOIL BORINGS, AS CONCURRED WITH BY ON–SITE CDM PERSONNEL.
10. SOIL BORINGS SB–24 THROUGH SB–33 WERE ADVANCED ON AUGUST 13, 2008 WITH MDEQ AND CDM PRESENT. SAMPLES WERE COLLECTED FROM THE SOIL BORINGS AND ANALYZED FOR TOTAL PCBs.
11. SOIL BORING SB–45 WAS ADVANCED ON SEPTEMBER 18, 2008 WITH CDM PRESENT. SAMPLES WERE COLLECTED FROM THE SOIL BORING AND ANALYZED FOR TOTAL PCBs.
12. TEST PIT 9 WAS EXCAVATED ON SEPTEMBER 17, 2008 WITH CDM PRESENT. SAMPLES WERE COLLECTED FROM THE TEST PIT AND ANALYZED FOR TOTAL PCBs.

0 30' 60'

GRAPHIC SCALE

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
KING HIGHWAY LANDFILL

R-2 AREA

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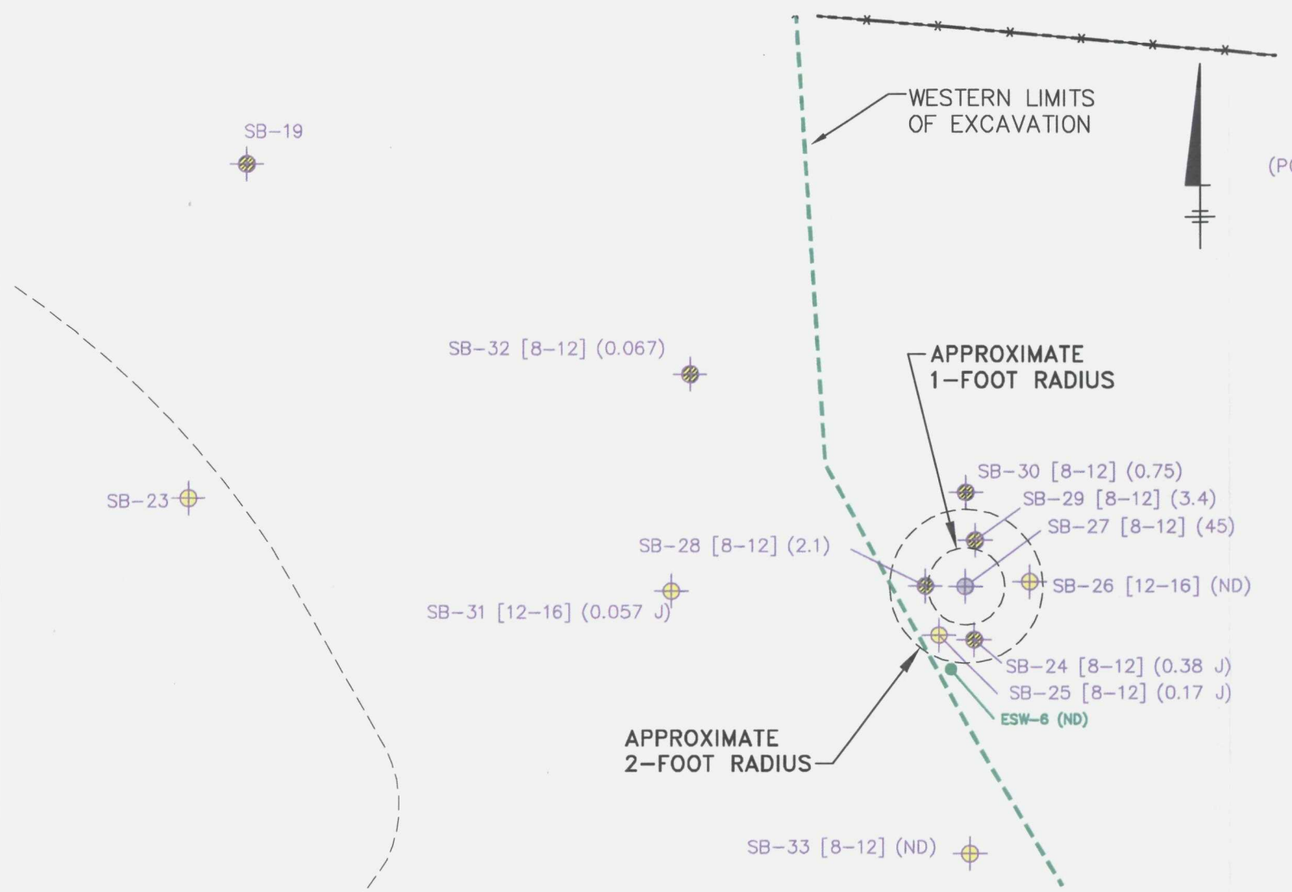
FIGURE 2

SOIL BORING	APPROXIMATE SAMPLE COLLECTION DEPTH (FT BGS)	PCB RESULTS IN PPM
SB–24	8 – 12	0.38 J
SB–25	8 – 12	0.17 J
SB–26	12 – 16	ND
SB–27	8 – 12	45
SB–28	8 – 12	2.1
SB–29	8 – 12	3.4
SB–30	8 – 12	0.75
SB–31	12 – 16	0.057 J
SB–32	8 – 12	0.067
SB–33	8 – 12	ND



LEGEND:

- AS–BUILT EXCAVATION LIMITS
- ESW–6 (ND) — POST–EXCAVATION SIDEWALL CONFIRMATION SAMPLE LOCATION (PCB RESULTS IN PPM)
- SB–32 [DEPTH INTERVAL] (PCB RESULTS IN PPM) — SOIL BORING
- NO RESIDUALS OBSERVED IN SOIL BORING
- SMALL/ISOLATED QUANTITIES OF RESIDUALS OBSERVED IN SOIL BORING
- DISTINCT LAYER OF RESIDUALS OBSERVED IN SOIL BORING

BASE MAP NOTE:

1. REFER TO FIGURE 2 FOR BASE MAP INFORMATION.

0 3' 6'

GRAPHIC SCALE

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
KING HIGHWAY LANDFILL

R-2 AREA

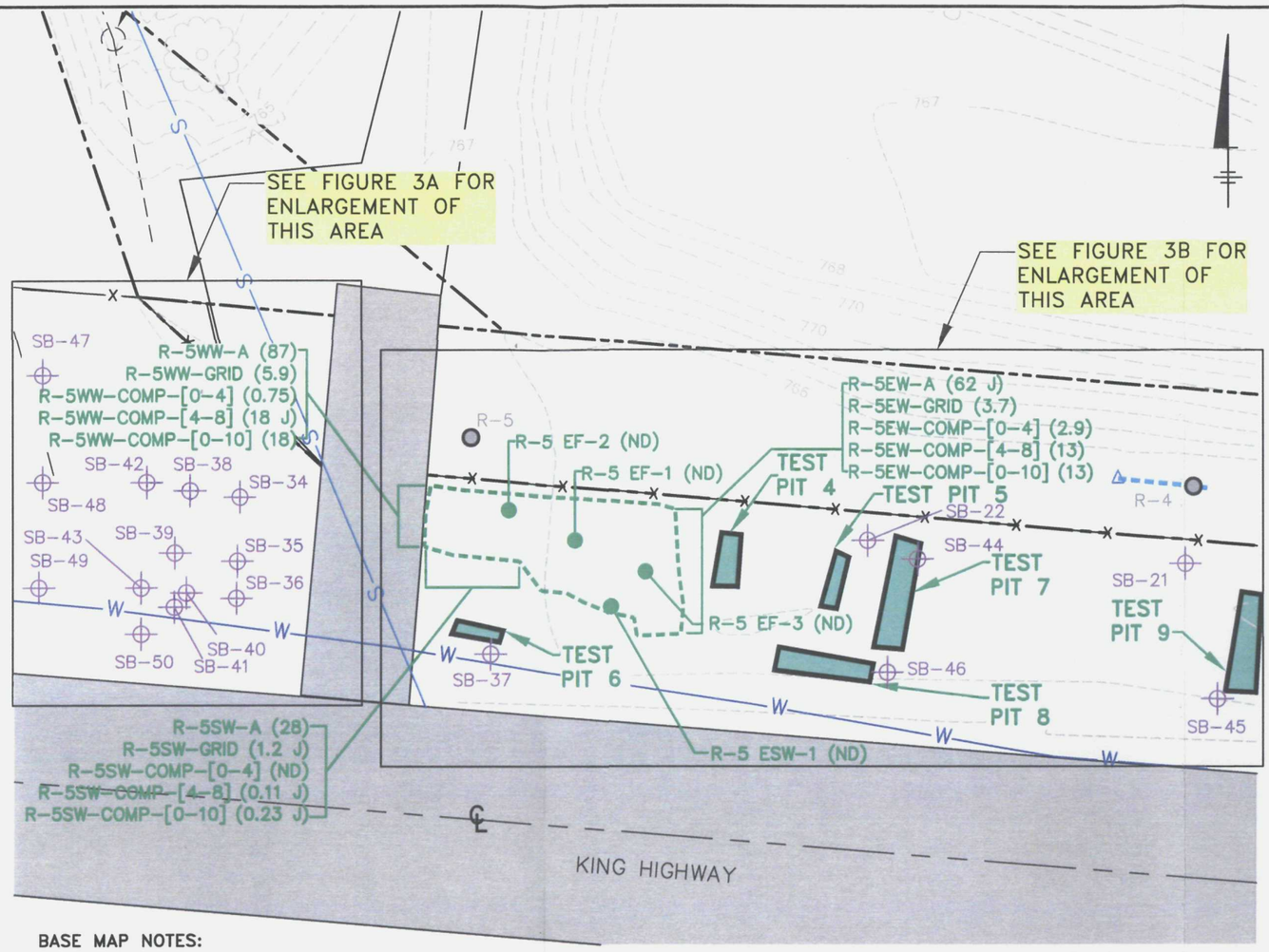
ARCADIS

FIGURE **2A**

LOCATION	DEPTH (FT BGS)	DESCRIPTION
R-5	1-4	NORTH OF SECURITY FENCE, EAST OF ACCESS ROAD
R-5EF-1	9	FLOOR OF EXCAVATION
R-5EF-2	10	FLOOR OF EXCAVATION
R-5EF-3	8.5	FLOOR OF EXCAVATION
R-5ESW-1	5	SOUTHERN SIDEWALL OF EXCAVATION
R-5WW-A	~7	WESTERN SIDEWALL OF EXCAVATION (1-WEEK TURN-AROUND TIME)
R-5SW-A	~4	EASTERN SIDEWALL OF EXCAVATION (1-WEEK TURN-AROUND TIME)
R-5EW-A	~4	SOUTHEASTERN SIDEWALL (CORNER) OF EXCAVATION
R-5WW-GRID	GRID COMPOSITE	WESTERN SIDEWALL OF EXCAVATION (SEE FIGURE 6)
R-5SW-GRID	GRID COMPOSITE	SOUTHERN SIDEWALL OF EXCAVATION (SEE FIGURE 6)
R-5EW-GRID	GRID COMPOSITE	EASTERN SIDEWALL OF EXCAVATION (SEE FIGURE 6)
R-5WW-COMP-[0-4]	GRID COMPOSITE	WESTERN WALL OF EXCAVATION (SEE FIGURE 9)
R-5WW-COMP-[4-8]	GRID COMPOSITE	WESTERN WALL OF EXCAVATION (SEE FIGURE 9)
R-5WW-COMP-[0-10]	GRID COMPOSITE	WESTERN WALL OF EXCAVATION (SEE FIGURE 9)
R-5SW-COMP-[0-4]	GRID COMPOSITE	SOUTHERN WALL OF EXCAVATION (SEE FIGURE 9)
R-5SW-COMP-[4-8]	GRID COMPOSITE	SOUTHERN WALL OF EXCAVATION (SEE FIGURE 10)
R-5SW-COMP-[0-10]	GRID COMPOSITE	SOUTHERN WALL OF EXCAVATION (SEE FIGURE 10)
R-5EW-COMP-[0-4]	GRID COMPOSITE	EASTERN WALL OF EXCAVATION (SEE FIGURE 10)
R-5EW-COMP-[4-8]	GRID COMPOSITE	EASTERN WALL OF EXCAVATION (SEE FIGURE 10)
R-5EW-COMP-[0-10]	GRID COMPOSITE	EASTERN WALL OF EXCAVATION (SEE FIGURE 10)

NOTE:

LOCATIONS ARE BASED ON MULTIPLE FIELD SURVEYS CONDUCTED BY TERRA CONTRACTING, LLC IN APRIL, MAY, AND JUNE 2008. HOWEVER, CERTAIN LOCATIONS ARE APPROXIMATE DUE TO ACCESS LIMITATIONS.



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- 770 FINAL AS-BUILT INDEX CONTOUR
- FINAL AS-BUILT INTERMEDIATE CONTOUR
- X SECURITY FENCE
- AS-BUILT EXCAVATION LIMITS
- AS-BUILT CUTOFF TRENCH LOCATION
- GAS VENT
- S APPROXIMATE LOCATION OF CITY SANITARY SEWER LINE (SEE NOTE 8)
- W APPROXIMATE LOCATION OF CITY WATER LINE (SEE NOTE 9)
- R-5 RESIDUALS OBSERVED AT/BEYOND EXCAVATION LIMITS
- R-5ESW-1 (ND) POST-EXCAVATION SIDEWALL CONFIRMATION SAMPLE LOCATION (PCB RESULTS IN PPM)
- R-5EF-1 (ND) POST-EXCAVATION FLOOR CONFIRMATION SAMPLE LOCATION (PCB RESULTS IN PPM)
- R-5SWW-A (87) DISCRETE PCB CHARACTERIZATION SAMPLE LOCATION (PCB RESULTS IN PPM) - COLLECTED ON 5/29/08
- R-5WW-GRID (5.92) COMPOSITE PCB CHARACTERIZATION SAMPLE LOCATION (PCB RESULTS IN PPM) - COLLECTED ON 5/29/08
- R-5SW-COMP-[0-4] (ND) COMPOSITE PCB CHARACTERIZATION SAMPLE LOCATION [DEPTH INTERVAL] (PCB RESULTS IN PPM) - COLLECTED ON 8/14/08
- SB-22 SOIL BORING (SEE NOTES 10-12)
- TEST PIT (SEE NOTES 13-14)

BASE MAP NOTES:

1. BASE MAP INFORMATION OBTAINED FROM CADD DRAWING FILE DEVELOPED BY RMT, INC., ANN ARBOR, MICHIGAN (CADD FILE: L1630SU01.DWG AS-BUILT SURVEY; 8/21/00).
2. FINAL AS-BUILT CONTOUR ELEVATIONS ARE SHOWN AND ARE BASED ON A FIELD SURVEY BY ATWELL-HICKS, INC., DATED 9/27/00 WITH REVISIONS DATED 10/23/00, 12/21/01, 12/10/02, AND 7/24/03.
3. FINAL AS-BUILT CONTOUR ELEVATIONS OF SEDIMENTATION BASIN ARE BASED ON A FIELD SURVEY BY PREIN-NEWHOF, DATED 2/3/04.
4. ELEVATIONS ARE BASED ON NGVD OF 1929 (MSL).
5. ORIGINAL PROPERTY SURVEY PERFORMED BY WILKINS & WHEATON ENGINEERING CO., INC., ON 7/1/96. ADDITIONAL PROPERTY SURVEY PERFORMED BY PREIN & NEWHOF ON APRIL 11, 2003, OCTOBER 5, 2004, AND AUGUST 18, 2007.
6. TOPOGRAPHIC CONTOUR INTERVAL IS 1 FOOT.
7. AS-BUILT EXCAVATION LIMITS AND AS-BUILT CUTOFF TRENCH LOCATION ARE BASED ON MULTIPLE FIELD SURVEYS CONDUCTED BY TERRA CONTRACTING, LLC IN APRIL, MAY, AND JUNE 2008.
8. APPROXIMATE LOCATION OF EXISTING 72-INCH-DIAMETER SANITARY SEWER LINE IS INFERRED BASED ON INFORMATION PROVIDED BY THE CITY OF KALAMAZOO. PER CITY OF KALAMAZOO, NO AS-BUILT SURVEY INFORMATION IS AVAILABLE FOR THIS LINE.
9. APPROXIMATE LOCATION OF EXISTING WATER LINE WAS FIELD MARKED BY THE CITY OF KALAMAZOO, AND SURVEYED BY PREIN & NEWHOF IN SEPTEMBER 2008.
10. SOIL BORINGS SB-1 THROUGH SB-16, WHICH WERE ADVANCED ON FEBRUARY 19 AND 20, 2008, ARE NOT SHOWN FOR CLARITY PURPOSES. FOR ADDITIONAL INFORMATION ON THESE SOIL BORINGS, REFER TO GEORGIA-PACIFIC'S APRIL 3, 2008 WORK PLAN.
11. SOIL BORINGS SB-21 AND SB-22 WERE ADVANCED ON MAY 21, 2008 WITH CDM PRESENT. SOIL BORINGS SB-21 AND SB-22 WERE VISUALLY OBSERVED FOR THE PRESENCE OF RESIDUALS. NO RESIDUALS WERE OBSERVED THAT MERITED ADVANCING ADDITIONAL DELINEATION SOIL BORINGS, AS CONCURRED WITH BY ON-SITE CDM PERSONNEL.
12. SOIL BORINGS SB-34 THROUGH SB-46 WERE ADVANCED ON SEPTEMBER 17 AND 18, 2008 WITH CDM PRESENT. SOIL BORINGS SB-47 THROUGH SB-50 WERE ADVANCED ON SEPTEMBER 26, 2008 WITH CDM PRESENT. SAMPLES WERE COLLECTED FROM THE SOIL BORINGS AND ANALYZED FOR TOTAL PCBs.
13. TEST PIT 4 WAS EXCAVATED ON JUNE 11, 2008 WITH CDM PRESENT. TEST PITS 5 AND 6 WERE EXCAVATED ON AUGUST 13, 2008 WITH MDEQ AND CDM PRESENT. TEST PITS 1 THROUGH 3, WHICH WERE EXCAVATED ON JANUARY 31, 2008, ARE NOT SHOWN FOR CLARITY PURPOSES. FOR ADDITIONAL INFORMATION ON TEST PITS 1 THROUGH 3 REFER TO GEORGIA-PACIFIC'S APRIL 3, 2008 WORK PLAN.
14. TEST PITS 7 THROUGH 9 WERE EXCAVATED ON SEPTEMBER 17, 2008 WITH CDM PRESENT. SAMPLES WERE COLLECTED FROM THE TEST PITS AND ANALYZED FOR TOTAL PCBs.
15. SAMPLE LOCATIONS WITH THE PREFIX ESW (EXCAVATION SIDEWALL) AND EF (EXCAVATION FLOOR) PRESENT CONFIRMATION SAMPLES COLLECTED FOLLOWING THE EXCAVATION WORK COMPLETED IN APRIL/MAY/JUNE 2008.

0 30' 60'

GRAPHIC SCALE

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
KING HIGHWAY LANDFILL

R-5 AREA

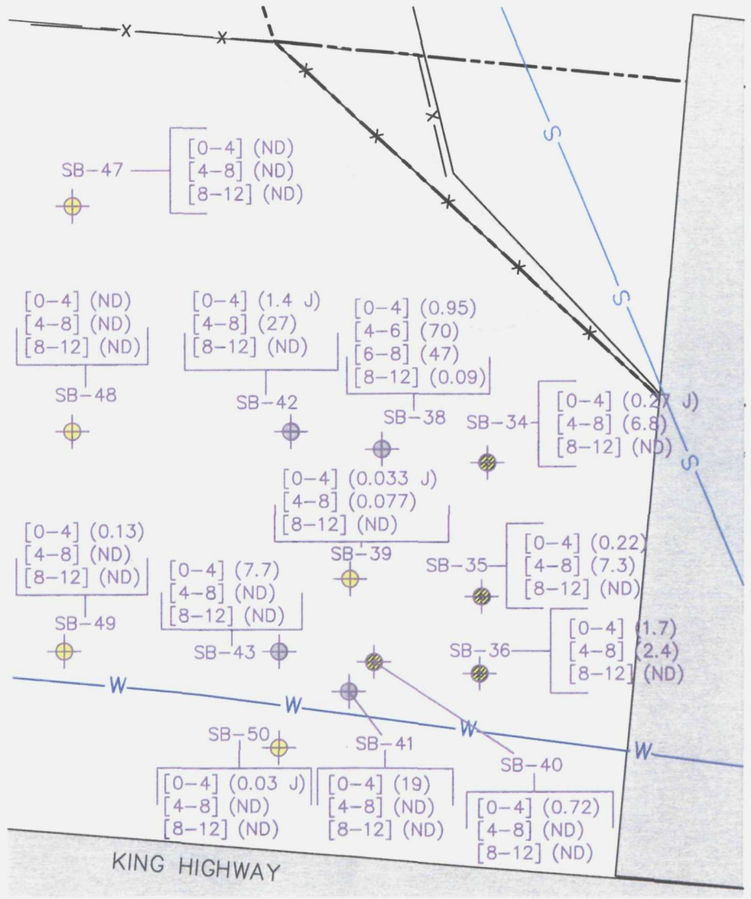
ARCADIS

FIGURE 3

LOCATION	PCB RESULTS IN PPM
SB-34 (0-4)	0.27 J
SB-34 (4-8)	6.8
SB-34 (8-12)	ND
SB-35 (0-4)	0.22
SB-35 (4-8)	7.3
SB-35 (8-12)	ND
SB-36 (0-4)	1.7
SB-36 (4-8)	2.4
SB-36 (8-12)	ND
SB-38 (0-4)	0.95
SB-38 (4-6)	70
SB-38 (6-8)	47
SB-38 (8-12)	0.09
SB-39 (0-4)	0.033 J
SB-39 (4-8)	0.077
SB-39 (8-12)	ND
SB-40 (0-4)	0.72
SB-40 (4-8)	ND
SB-40 (8-12)	ND
SB-41 (0-4)	19
SB-41 (4-8)	ND
SB-41 (8-12)	ND
SB-42 (0-4)	1.4 J
SB-42 (4-8)	27
SB-42 (8-12)	ND
SB-43 (0-4)	7.7
SB-43 (4-8)	ND
SB-43 (8-12)	ND
SB-47 (0-4)	ND
SB-47 (4-8)	ND
SB-47 (8-12)	ND
SB-48 (0-4)	ND
SB-48 (4-8)	ND
SB-48 (8-12)	ND
SB-49 (0-4)	0.13
SB-49 (4-8)	ND
SB-49 (8-12)	ND
SB-50 (0-4)	0.03 J
SB-50 (4-8	ND
SB-50 (8-12)	ND

NOTE:

LOCATIONS ARE BASED ON FIELD SURVEYS CONDUCTED BY PREIN & NEWHOF IN SEPTEMBER 2008.



BASE MAP NOTES:

1. SEE FIGURE 3 FOR BASE MAP INFORMATION.

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FINAL AS-BUILT INTERMEDIATE CONTOUR
- X — SECURITY FENCE
- S — APPROXIMATE LOCATION OF CITY SANITARY SEWER LINE
- W — APPROXIMATE LOCATION OF CITY WATER LINE
- SB-39 [DEPTH INTERVAL] (PCB RESULTS IN PPM) — SOIL BORING
- NO RESIDUALS OBSERVED IN SOIL BORING
- SMALL/ISOLATED QUANTITIES OF RESIDUALS OBSERVED IN SOIL BORING
- DISTINCT LAYER OF RESIDUALS OBSERVED IN SOIL BORING

0 15' 30'

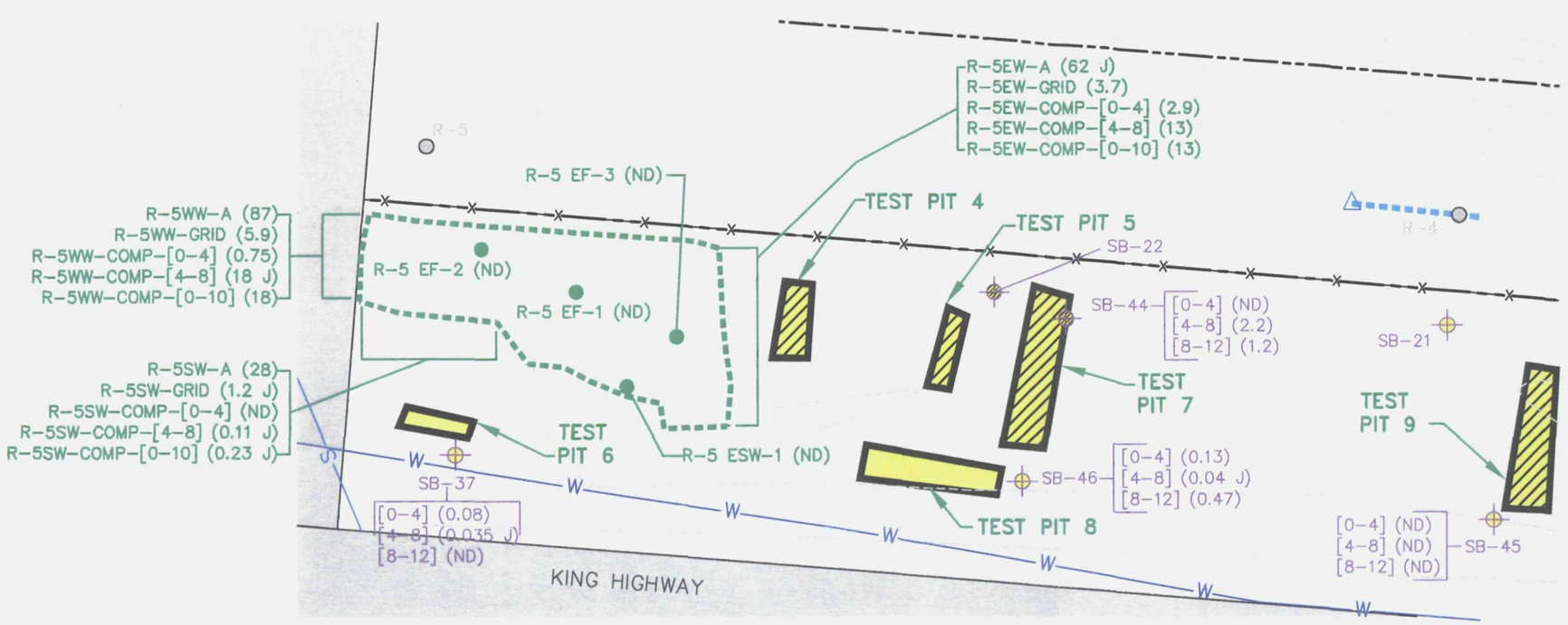
GRAPHIC SCALE

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
KING HIGHWAY LANDFILL

R-5 AREA (WEST)

ARCADIS

FIGURE **3A**



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FINAL AS-BUILT INDEX CONTOUR
- FINAL AS-BUILT INTERMEDIATE CONTOUR
- SECURITY FENCE
- AS-BUILT EXCAVATION LIMITS
- APPROXIMATE LOCATION OF CITY SANITARY SEWER LINE
- APPROXIMATE LOCATION OF CITY WATER LINE
- R-5 — RESIDUALS OBSERVED AT/BEYOND EXCAVATION LIMITS
- R-5ESW-1 (ND) — POST-EXCAVATION SIDEWALL CONFIRMATION SAMPLE LOCATION (PCB RESULTS IN PPM)
- R-5EF-1 (ND) — POST-EXCAVATION FLOOR CONFIRMATION SAMPLE LOCATION (PCB RESULTS IN PPM)
- R-5SWW-A (87) — DISCRETE PCB CHARACTERIZATION SAMPLE LOCATION (PCB RESULTS IN PPM) – COLLECTED ON 5/29/08
- R-5WW-GRID (5.92) — COMPOSITE PCB CHARACTERIZATION SAMPLE LOCATION (PCB RESULTS IN PPM) – COLLECTED ON 5/29/08
- R-5SW-COMP-[0-4] (ND) — COMPOSITE PCB CHARACTERIZATION SAMPLE LOCATION [DEPTH INTERVAL] (PCB RESULTS IN PPM) – COLLECTED ON 8/14/08
- SB-22 [DEPTH INTERVAL] (PCB RESULTS IN PPM) — SOIL BORING
- NO RESIDUALS OBSERVED IN SOIL BORING
- SMALL/ISOLATED QUANTITIES OF RESIDUALS OBSERVED IN SOIL BORING
- TEST PIT – NO RESIDUALS OBSERVED
- TEST PIT – SMALL/ISOLATED QUANTITIES OF RESIDUALS OBSERVED

LOCATION	PCB RESULTS IN PPM
SB-37 (0-4)	0.08
SB-37 (4-8)	0.035 J
SB-37 (8-12)	ND
SB-44 (0-4)	ND
SB-44 (4-8)	2.2
SB-44 (8-12)	1.2
SB-45 (0-4)	ND
SB-45 (4-8)	ND
SB-45 (8-12)	ND
SB-46 (0-4)	0.13
SB-46 (4-8)	0.04 J
SB-46 (8-12)	0.47

NOTE:
LOCATIONS ARE BASED ON FIELD SURVEYS CONDUCTED BY PREIN & NEWHOF IN SEPTEMBER 2008.

TEST PIT NUMBER	RESIDUALS OBSERVED?	APPROXIMATE SAMPLE COLLECTION DEPTH (FEET BGS)	PCB RESULTS IN PPM
4	YES	--	--
5	YES	--	--
6	NO	--	--
7	YES	9-10	ND
		5.5	14 J
		5.5	ND
		COMPOSITE	0.084
8	NO	5	ND
9	YES	3	7
		3.5	63
		10	0.069

-- NO SAMPLES COLLECTED

BASE MAP NOTE:

1. SEE FIGURE 3 FOR BASE MAP INFORMATION.

0 20' 40'
GRAPHIC SCALE

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
KING HIGHWAY LANDFILL

R-5 AREA (EAST)

ARCADIS

FIGURE
3B

CITY: SYRACUSE-NY DIV/GROUP:141 DB: AGS KFS KMD LD: PIC: B. DESHIELDS PM: M. HASSETT TM: M. HASSETT LYR: ON=*;OFF=*REF,,|X-EP,|EXTEXT-PCB,|EX_STORM,|EX_GRAVEL,|SURV-IRON
\\NY4FILE3\Data\ENVCAD\SYRACUSE\ACT\B0064583\0000\0067\DWG\ASBUILT\SURVEY\64583G09.DWG LAYOUT: 3B SAVED: 12/19/2008 2:50 PM ACADVER: 17.0S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/23/2008 8:49 AM BY: JONES, WENDY
XREFS: 64583X01 64583X00 IMAGES: PROJECTNAME: ---

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FINAL AS-BUILT INDEX CONTOUR
- FINAL AS-BUILT INTERMEDIATE CONTOUR
- SECURITY FENCE
- AS-BUILT EXCAVATION LIMITS
- AS-BUILT CUTOFF TRENCH LOCATION
- GAS VENT
- APPROXIMATE LOCATION OF CITY SANITARY SEWER LINE
- APPROXIMATE LOCATION OF CITY WATER LINE
- SB-22 (PCB RESULTS IN PPM) — SOIL BORING (SEE NOTE 2)
- NO RESIDUALS OBSERVED IN SOIL BORING
- SMALL/ISOLATED QUANTITIES OF RESIDUALS OBSERVED IN SOIL BORING
- RESIDUALS OBSERVED AT/BEYOND EXCAVATION LIMITS IN SOIL BORING
- TEST PIT – NO RESIDUALS OBSERVED
- TEST PIT – SMALL/ISOLATED QUANTITIES OF RESIDUALS OBSERVED
- INTERPOLATED HORIZONTAL EXTENT OF PCB-CONTAMINATED MATERIAL (SEE NOTE 3)

NOTES:

1. SEE FIGURE 3 FOR BASE MAP INFORMATION.
2. THREE PCB SAMPLES WERE COLLECTED FROM EACH OF SOIL BORINGS SB-34 THROUGH SB-50; HOWEVER, ONLY THE HIGHEST PCB RESULT IS SHOWN HEREON FOR CLARITY PURPOSES. FOR ADDITIONAL PCB RESULTS FROM SOIL BORINGS SB-34 THROUGH SB-50, REFER TO FIGURES 3A AND 3B.
3. THE NORTHERN LIMIT OF THE DELINEATION BOUNDARY IS PLACED ALONG GEORGIA-PACIFIC'S PROPERTY LINE, AS NO INVESTIGATION WAS REQUIRED NORTH OF THE PROPERTY LINE (I.E., WITHIN GEORGIA-PACIFIC'S PROPERTY). LOCATIONS OUTSIDE OF GEORGIA-PACIFIC'S PROPERTY WERE DELINEATED BASED ON SPATIALLY INTERPOLATING THE EXISTING PCB DATA. FOR DELINEATION PURPOSES, MDEQ'S TARGET DETECTION LIMIT OF 0.33 PPM WAS APPLIED, AND A BOUNDARY WAS ASSIGNED AROUND AREAS WITH PCB CONCENTRATIONS ≥0.33 PPM.

0 30' 60'

GRAPHIC SCALE

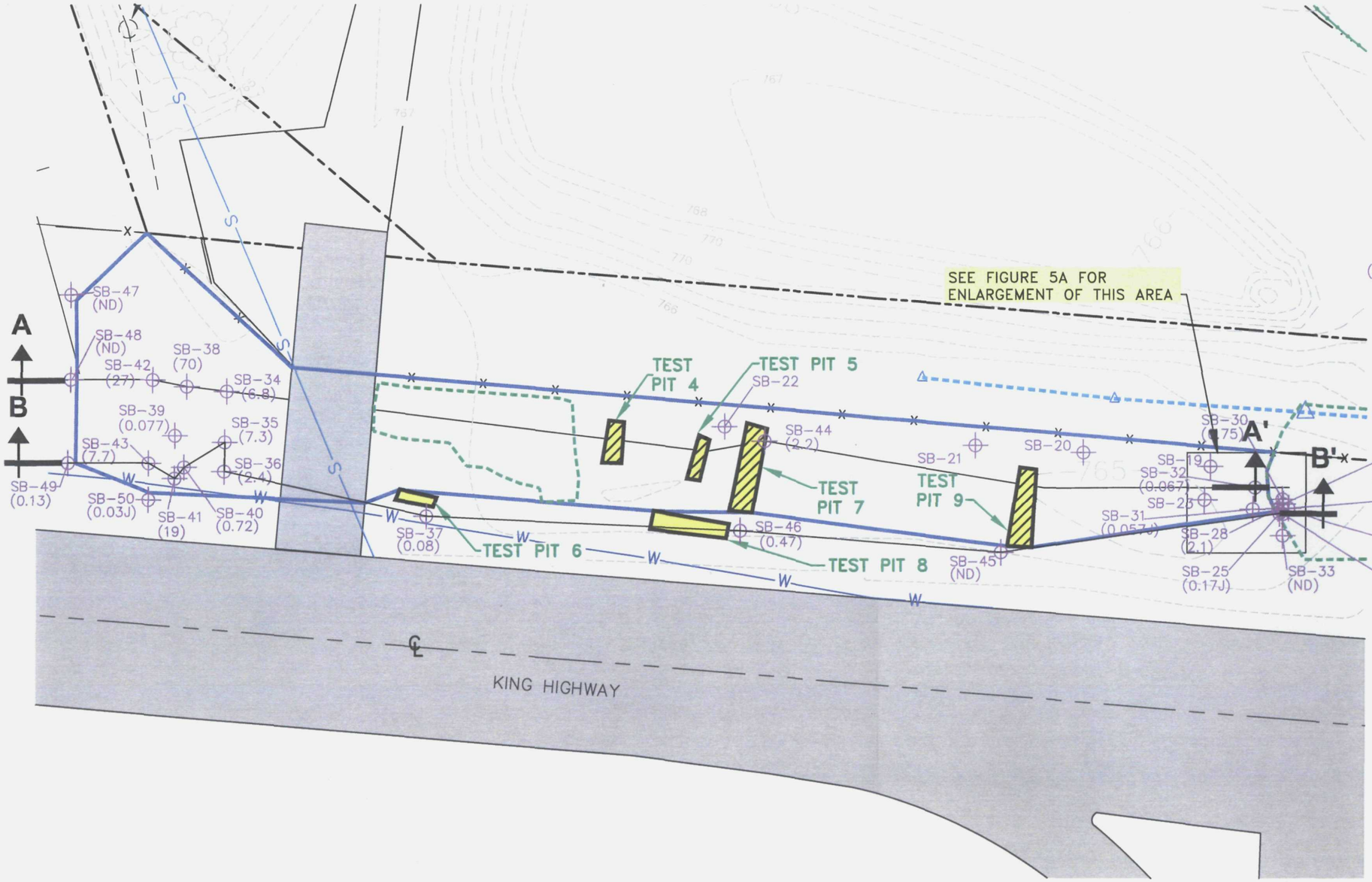
KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
KING HIGHWAY LANDFILL

HORIZONTAL DELINEATION

ARCADIS

FIGURE 4

CITY: SYRACUSE-NY DIV/GROUP:141 DB:AGS KFS KMD LD: PIC: B. DESHIELDS PM: M. HASSETT TM: M. HASSETT LYR: ON=*;OFF=*REF; |EX_GRAVEL, |EX_STORM, |SURV-IRON, IX-EP
G:\CAD\ACT\B0064583000000075\DWG\AS-BUILT\SURVEY\64583G11.DWG LAYOUT: 4 SAVED: 10/24/2008 8:08 PM ACADVER: 17.0S (LMS TECH) PAGESETUP: C-LB-PDF-TABLOID PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 10/29/2008 1:07 PM BY: SCHILLING, ADAM
XREFS: IMAGES: PROJECTNAME: ---
64583X01
64583X00



SEE FIGURE 5B FOR VERTICAL CROSS SECTION A.
SEE FIGURE 5C FOR VERTICAL CROSS SECTION B.

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FINAL AS-BUILT INDEX CONTOUR
- FINAL AS-BUILT INTERMEDIATE CONTOUR
- SECURITY FENCE
- AS-BUILT EXCAVATION LIMITS
- AS-BUILT CUTOFF TRENCH LOCATION
- GAS VENT
- APPROXIMATE LOCATION OF CITY SANITARY SEWER LINE
- APPROXIMATE LOCATION OF CITY WATER LINE
- SB-22 (PCB RESULTS IN PPM) — SOIL BORING (SEE NOTE 2)
- TEST PIT – NO RESIDUALS OBSERVED
- TEST PIT – SMALL/ISOLATED QUANTITIES OF RESIDUALS OBSERVED
- *INTERPOLATED HORIZONTAL EXTENT OF PCB-CONTAMINATED MATERIAL (SEE NOTE 3)*

NOTES:

1. SEE FIGURE 3 FOR BASE MAP INFORMATION.
2. THREE PCB SAMPLES WERE COLLECTED FROM EACH OF SOIL BORINGS SB-34 THROUGH SB-50; HOWEVER, ONLY THE HIGHEST PCB RESULT IS SHOWN HEREON FOR CLARITY PURPOSES. FOR ADDITIONAL PCB RESULTS FROM SOIL BORINGS SB-34 THROUGH SB-50, REFER TO FIGURES 3A AND 3B.
3. THE NORTHERN LIMIT OF THE DELINEATION BOUNDARY IS PLACED ALONG GEORGIA-PACIFIC'S PROPERTY LINE, AS NO INVESTIGATION WAS REQUIRED NORTH OF THE PROPERTY LINE (I.E., WITHIN GEORGIA-PACIFIC'S PROPERTY). LOCATIONS OUTSIDE OF GEORGIA-PACIFIC'S PROPERTY WERE DELINEATED BASED ON SPATIALLY INTERPOLATING THE EXISTING PCB DATA. FOR DELINEATION PURPOSES, MDEQ'S TARGET DETECTION LIMIT OF 0.33 PPM WAS APPLIED, AND A BOUNDARY WAS ASSIGNED AROUND AREAS WITH PCB CONCENTRATIONS ≥0.33 PPM.

0 30' 60'
GRAPHIC SCALE

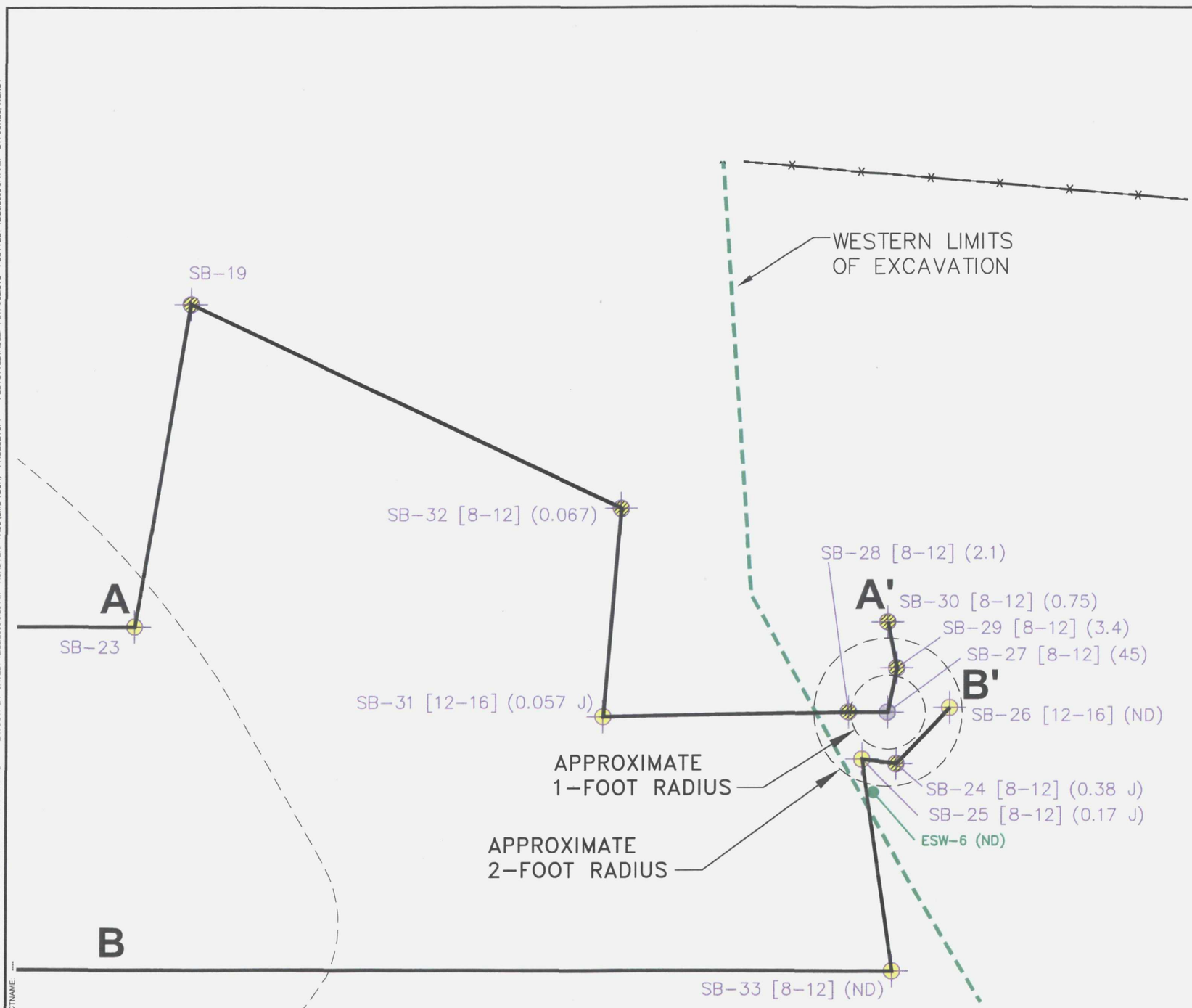
KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
KING HIGHWAY LANDFILL

VERTICAL DELINEATION

ARCADIS

FIGURE 5

CITY: SYRACUSE-NY DIV/GROUP:141 DB: AGS AMS WLJ LD: PIC: B. DESHIELDS PM: M. HASSETT TM: M. HASSETT LYR: ON=*;OFF=*REF; JEX_GRAVEL; JEX_STORM; ISURV-IRON; JX-EP
\\NY4FILE3\Data\ENVCAD\SYRACUSE\ACTIVE\64583\300000067\DWG\ASBUILT\SURVEY\64583G21.DWG LAYOUT: 5 SAVED: 12/23/2008 10:58 AM ACADVER: 17.0S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/23/2008 10:58 AM BY: JONES, WENDY
XREFS: IMAGES: PROJECTNAME: ---
64583X01
64583X00



LEGEND:

- AS-BUILT EXCAVATION LIMITS
- ESW-6 (ND) — POST-EXCAVATION SIDEWALL CONFIRMATION SAMPLE LOCATION (PCB RESULTS IN PPM)
- SB-32 [DEPTH INTERVAL] (PCB RESULTS IN PPM) — SOIL BORING
- NO RESIDUALS OBSERVED IN SOIL BORING
- SMALL/ISOLATED QUANTITIES OF RESIDUALS OBSERVED IN SOIL BORING
- DISTINCT LAYER OF RESIDUALS OBSERVED IN SOIL BORING

BASE MAP NOTE:

1. REFER TO FIGURE 2 FOR BASE MAP INFORMATION.

0 3' 6'

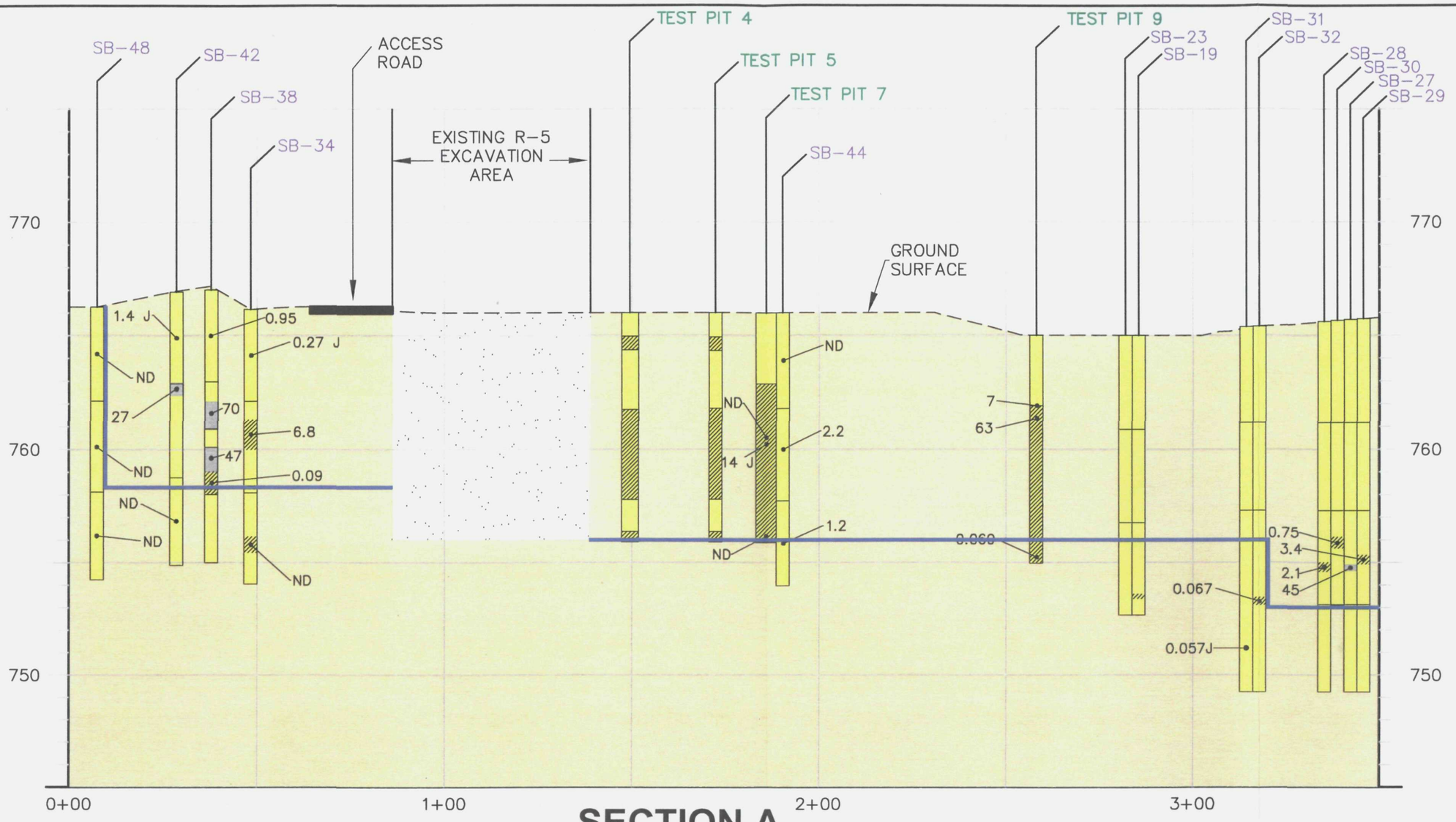
GRAPHIC SCALE

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
KING HIGHWAY LANDFILL

VERTICAL DELINEATION

ARCADIS

FIGURE
5A



SECTION A

LEGEND:

SOIL BORING ID

0–4' DEPTH INT.
4–8' DEPTH INT.
8–12' DEPTH INT.
12–16' DEPTH INT.
PCB RESULTS IN PPM

TEST PIT ID

0–10' DEPTH INT.

- NO RESIDUALS OBSERVED
- SMALL/ISOLATED QUANTITIES OF RESIDUALS OBSERVED
- DISTINCT LAYER OF RESIDUALS OBSERVED
- INTERPOLATED VERTICAL EXTENT OF PCB–CONTAMINATED MATERIAL
- EXISTING MATERIAL EXCAVATED AND REPLACED WITH CLEAN IMPORTED BACKFILL

NOTE:

1. ALL FEATURES ARE TO SCALE WITH THE EXCEPTION OF THE HORIZONTAL SCALE OF THE SOIL BORINGS WHICH HAVE BEEN EXAGGERATED FOR CLARITY PURPOSES.

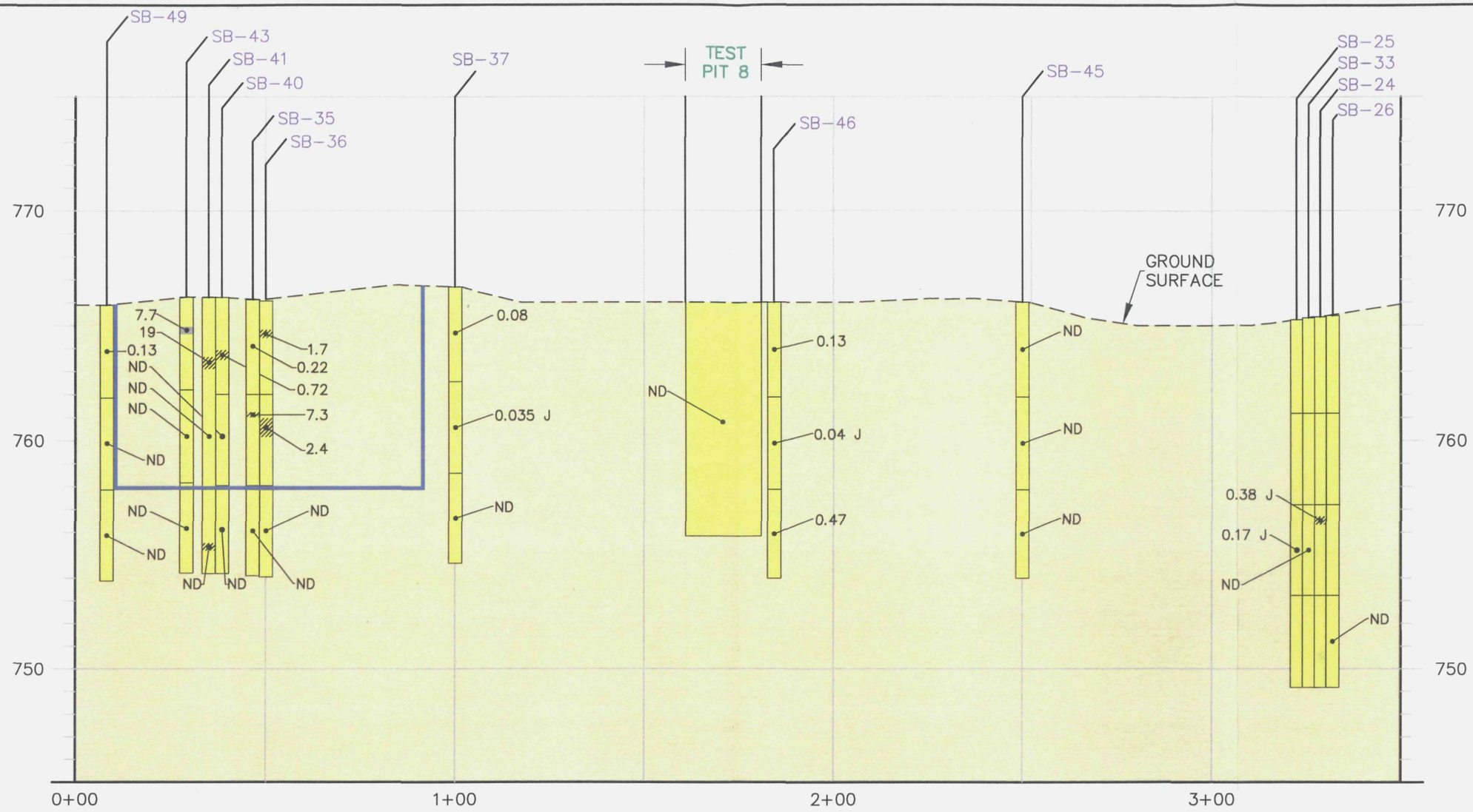
0 30' 60'
HORIZONTAL SCALE
0 5' 10'
VERTICAL SCALE

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
KING HIGHWAY LANDFILL

VERTICAL DELINEATION CROSS SECTION A

ARCADIS

FIGURE
5B



SECTION B

LEGEND:

SOIL BORING ID

0–4' DEPTH INT.

4–8' DEPTH INT.

8–12' DEPTH INT.

12–16' DEPTH INT.

PCB RESULTS IN PPM

TEST PIT ID

0–10' DEPTH INT.

NO RESIDUALS OBSERVED

SMALL/ISOLATED QUANTITIES OF RESIDUALS OBSERVED

DISTINCT LAYER OF RESIDUALS OBSERVED

INTERPOLATED VERTICAL EXTENT OF PCB–CONTAMINATED MATERIAL

NOTE:

1. ALL FEATURES ARE TO SCALE WITH THE EXCEPTION OF THE HORIZONTAL SCALE OF THE SOIL BORINGS WHICH HAVE BEEN EXAGGERATED FOR CLARITY PURPOSES.

0 30' 60'
HORIZONTAL SCALE

0 5' 10'
VERTICAL SCALE

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
KING HIGHWAY LANDFILL

VERTICAL DELINEATION CROSS SECTION B

ARCADIS

FIGURE
5C

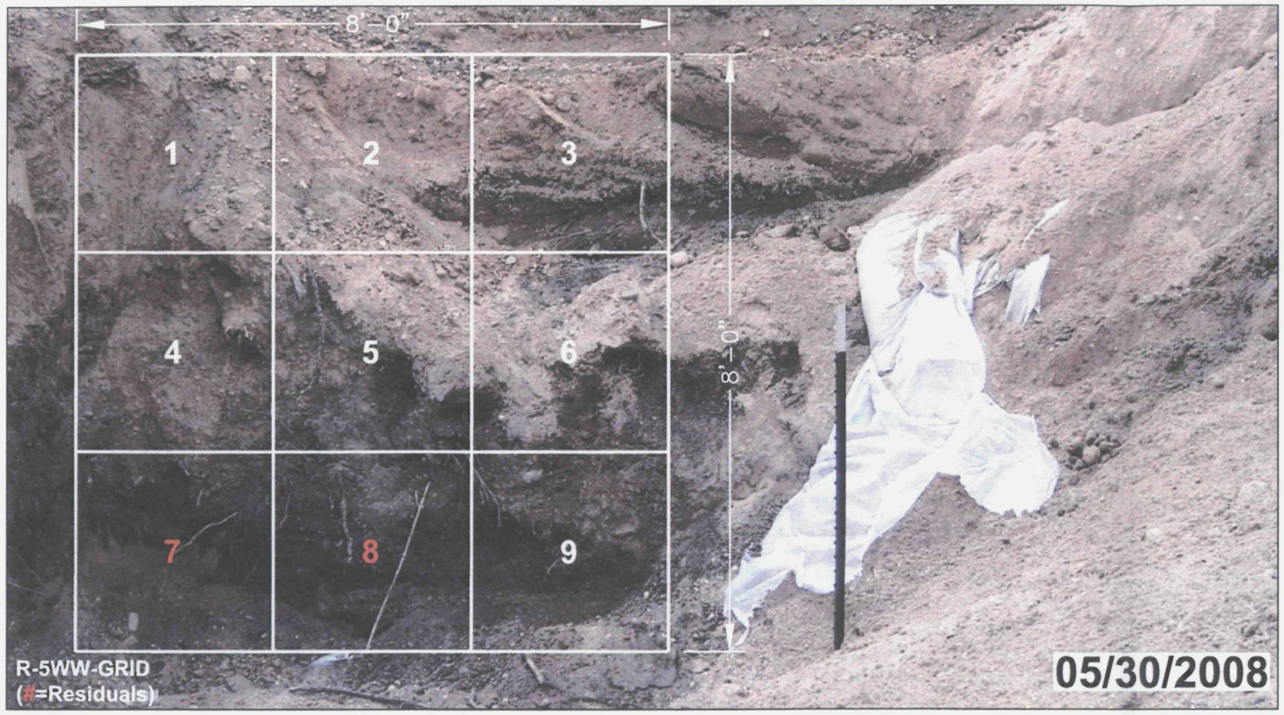


PHOTO NO. 1: R-5 EXCAVATION AREA WEST WALL COMPOSITE SAMPLE GRID

PHOTO NO. 2: R-5 EXCAVATION AREA SOUTH WALL COMPOSITE SAMPLE GRID

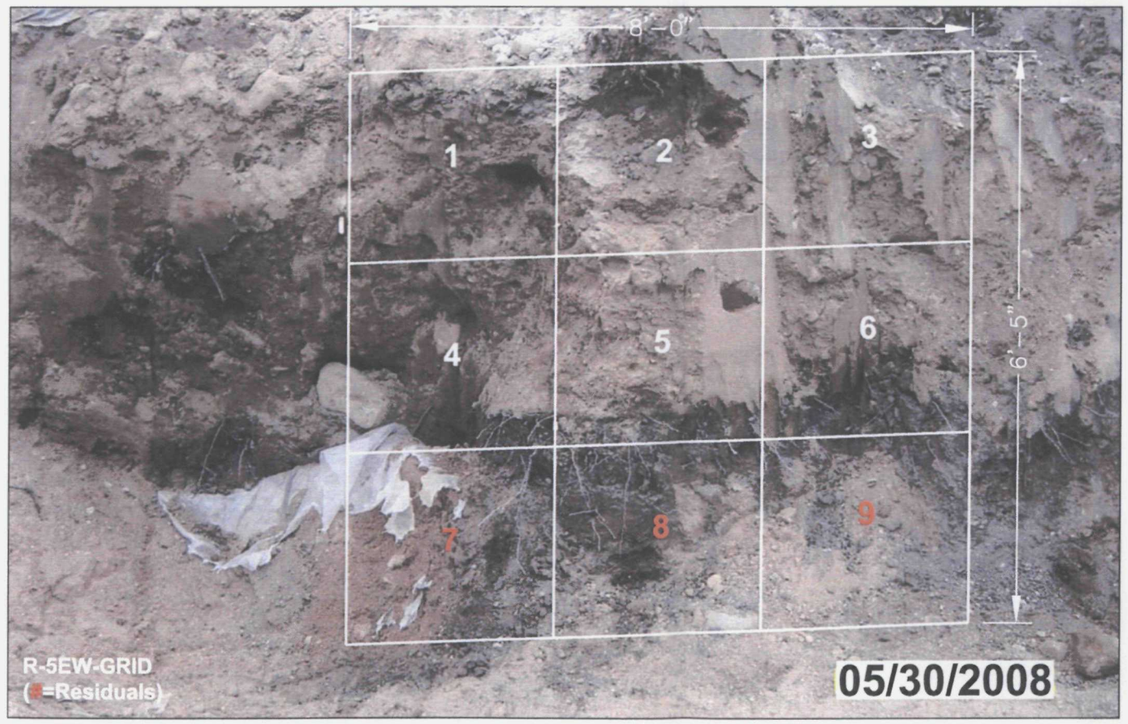


PHOTO NO. 3: R-5 EXCAVATION AREA EAST WALL COMPOSITE SAMPLE GRID

NOTES:

1. EACH COMPOSITE SIDEWALL SAMPLE (I.E., R-5WW-GRID, R-5SW-GRID, AND R-5EW-GRID) INCLUDES 9 DISCRETE GRAB SAMPLES SPATIALLY DISTRIBUTED ALONG THE SIDEWALL IN THE SQUARE GRID PATTERN DEPICTED ON PHOTO NOS. 1, 2, AND 3.
2. RED NUMBERS INDICATE A GRID AREA WHERE RESIDUALS WERE PRESENT WITHIN THE SAMPLE.
3. LOCATIONS OF SAMPLING GRIDS SHOWN HEREON ARE APPROXIMATE, AS PHOTOS WERE TAKEN AT VARIOUS ANGLES AND VARY IN SCALE. THESE GRIDS ARE OVERLAIN FOR PRESENTATION PURPOSES ONLY TO INDICATE THE GENERAL AREA OVER WHICH THE SAMPLING GRID WAS PLOTTED.

NOT TO SCALE

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
KING HIGHWAY LANDFILL

R-5 EXCAVATION AREA - MAY 29, 2008
GRID COMPOSITE SAMPLE PHOTOS

ARCADIS

FIGURE
6

PHOTO NO. 4: R-5 EXCAVATION AREA EASTERN SIDE WALL

PHOTO NO. 5: R-5 EXCAVATION AREA EASTERN SIDE WALL

PHOTO NO. 6: EXCAVATED SOIL FROM TEST PIT NO. 5 TRANSPORTED OFF-SITE FOR DISPOSAL

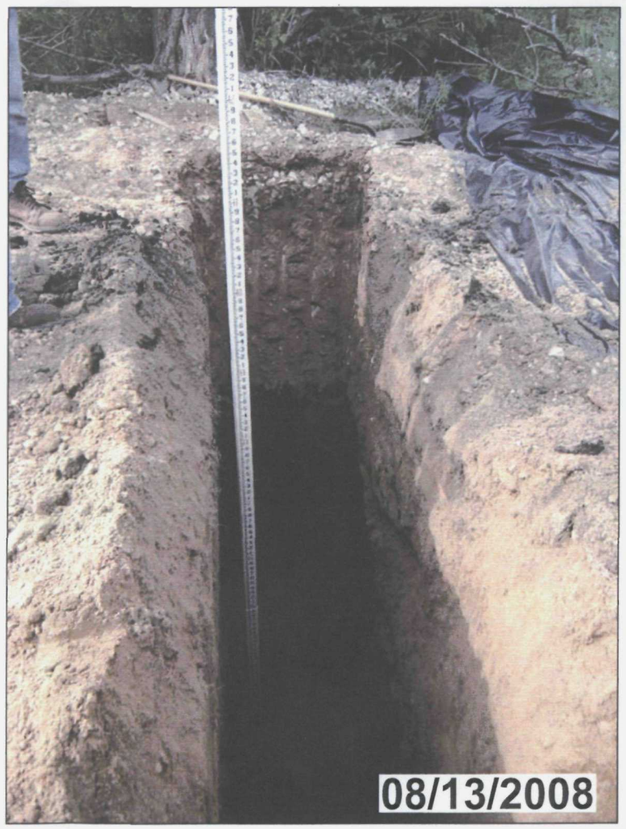


PHOTO NO. 7: TEST PIT NO. 5

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R-5 EXCAVATION AREA AND TEST PIT 5 PHOTOS

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FIGURE 7

PHOTO NO. 8: R-5 EXCAVATION AREA SOUTHERN SIDE WALL

PHOTO NO. 9: EXCAVATED SOIL FROM TEST PIT NO. 6

PHOTO NO. 10: TEST PIT NO. 6

PHOTO NO. 11: R-5 EXCAVATION AREA SOUTHWESTERN CORNER

PHOTO NO. 12: R-5 EXCAVATION AREA WESTERN SIDE WALL

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R-5 EXCAVATION AREA AND TEST PIT 6 PHOTOS

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FIGURE
8

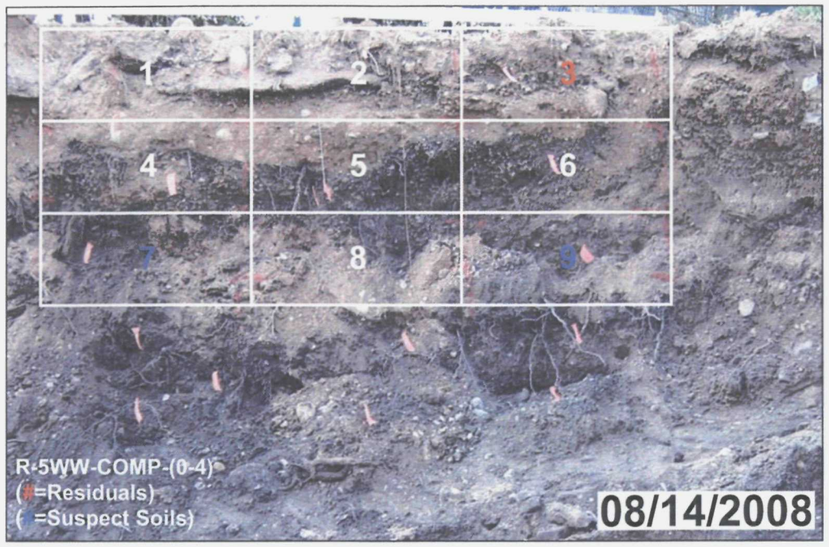

PHOTO NO. 13: R-5 EXCAVATION AREA WEST WALL COMPOSITE SAMPLE GRID – 0– TO 4–FOOT DEPTH INTERVAL

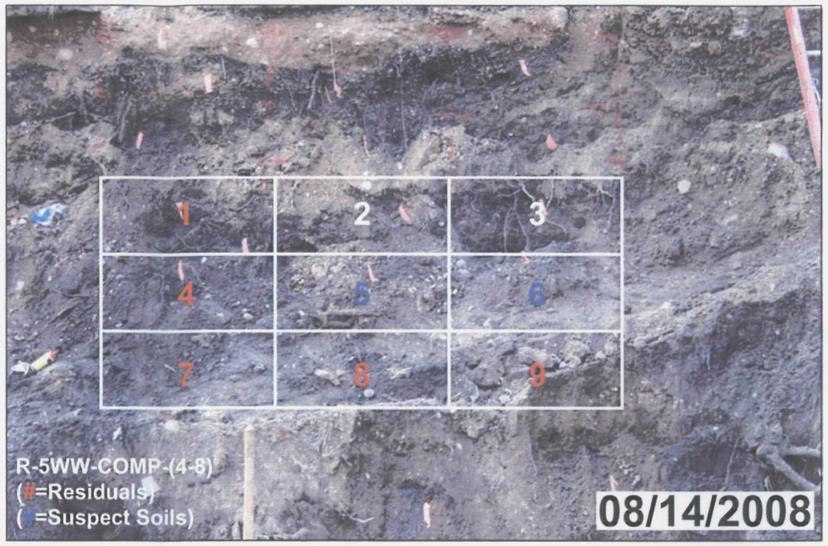

PHOTO NO. 14: R-5 EXCAVATION AREA WEST WALL COMPOSITE SAMPLE GRID – 4– TO 8–FOOT DEPTH INTERVAL

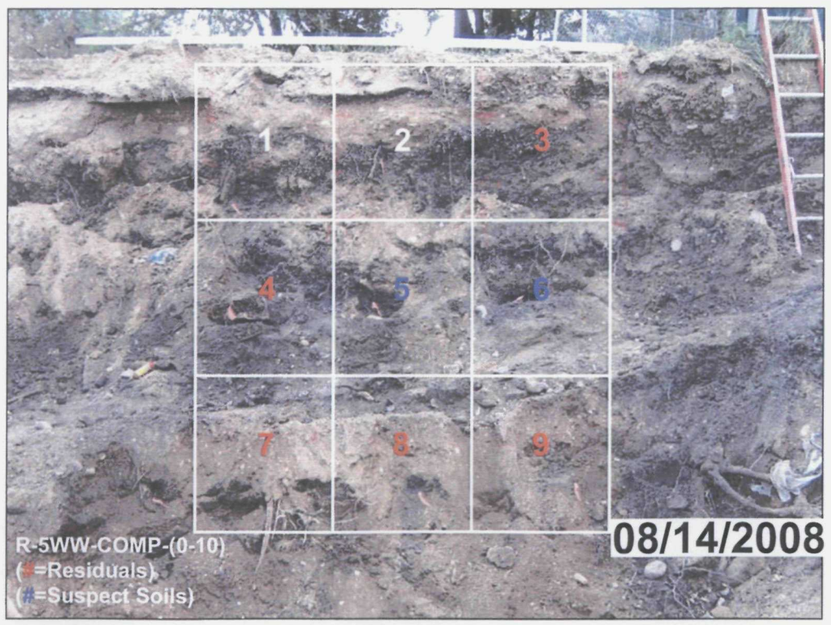

PHOTO NO. 15: R-5 EXCAVATION AREA WEST WALL COMPOSITE SAMPLE GRID – 0– TO 10–FOOT DEPTH INTERVAL

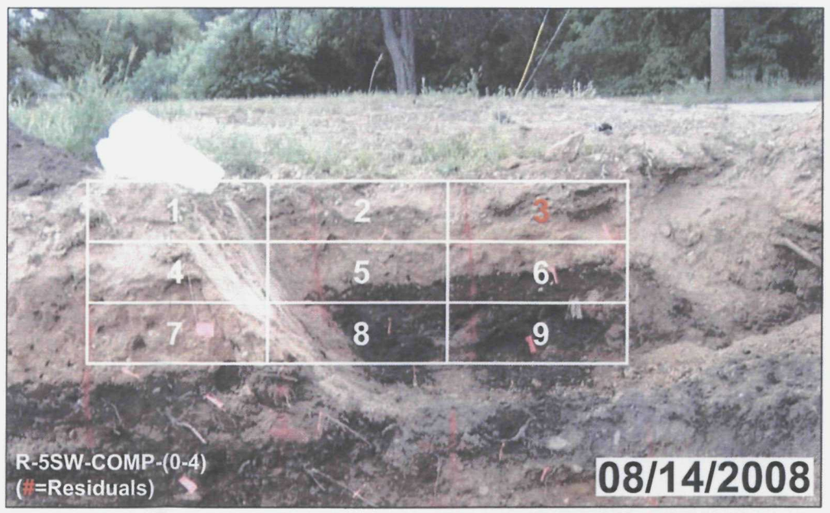

PHOTO NO. 16: R-5 EXCAVATION AREA SOUTH WALL COMPOSITE SAMPLE GRID – 0– TO 4–FOOT DEPTH INTERVAL

NOT TO SCALE

NOTE:

1. EACH COMPOSITE SIDEWALL SAMPLE (I.E., R–5WW–COMP–(0–4), R–5WW–COMP–(4–8), R–5WW–COMP–(0–10), AND R–5SW–COMP–(0–4)) INCLUDES 9 DISCRETE GRAB SAMPLES SPATIALLY DISTRIBUTED ALONG THE SIDEWALL IN THE SQUARE GRID PATTERN DEPICTED ON PHOTO NOS. 13, 14, 15, AND 16.
2. RED NUMBERS INDICATE A GRID AREA WHERE RESIDUALS WERE OBSERVED THROUGH VISUAL OBSERVATION.
3. BLUE NUMBERS INDICATE A GRID AREA WHERE SUSPECT SOILS (AREAS THAT COULD NOT BE POSITIVELY IDENTIFIED AS RESIDUALS) WERE OBSERVED THROUGH VISUAL OBSERVATION.
4. ORANGE PIN FLAGS WERE INSERTED AT LOCATIONS WHERE SAMPLES WERE COLLECTED. IN GRID AREAS WHERE RESIDUALS WERE OBSERVED, SAMPLES WERE BIASED TOWARDS THOSE RESIDUALS (I.E., SAMPLES WERE NOT NECESSARILY COLLECTED FROM THE CENTER OF EACH GRID AREA). NOTE THAT THE SAMPLE LOCATIONS ARE INDICATED BY THE PIN INSERTION POINT, NOT THE LOCATION OF THE ORANGE FLAG LOCATED ON THE END OF THE PIN.
5. LOCATIONS OF SAMPLING GRIDS SHOWN HEREON ARE APPROXIMATE, AS PHOTOS WERE TAKEN AT VARIOUS ANGLES AND VARY IN SCALE. THESE GRIDS ARE OVERLAIN FOR PRESENTATION PURPOSES ONLY TO INDICATE THE GENERAL AREA OVER WHICH THE SAMPLING GRID WAS PLOTTED.

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**R-5 EXCAVATION AREA - AUGUST 14, 2008
GRID COMPOSITE SAMPLE PHOTOS**

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FIGURE
9

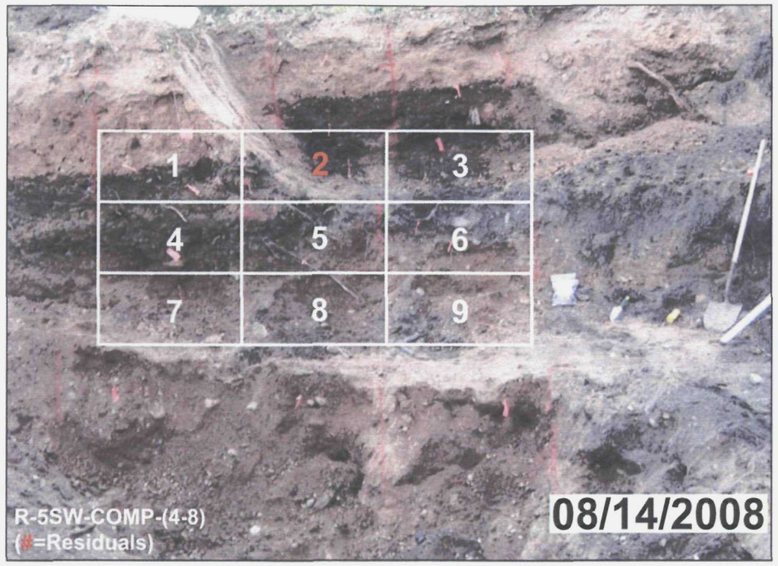

PHOTO NO. 17: R-5 EXCAVATION AREA SOUTH WALL COMPOSITE SAMPLE GRID – 4– TO 8–FOOT DEPTH INTERVAL

PHOTO NO. 18: R-5 EXCAVATION AREA SOUTH WALL COMPOSITE SAMPLE GRID – 0– TO 10–FOOT DEPTH INTERVAL

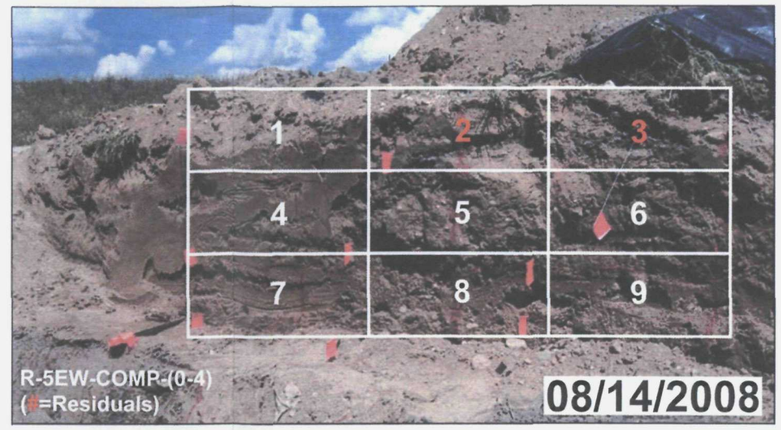

PHOTO NO. 19: R-5 EXCAVATION AREA EAST WALL COMPOSITE SAMPLE GRID – 0– TO 4–FOOT DEPTH INTERVAL

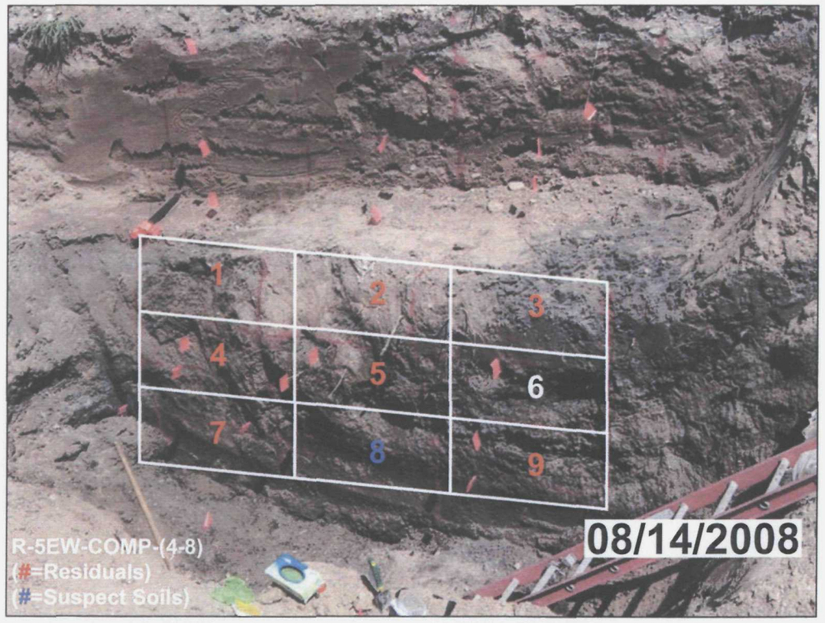

PHOTO NO. 20: R-5 EXCAVATION AREA EAST WALL COMPOSITE SAMPLE GRID – 4– TO 8–FOOT DEPTH INTERVAL

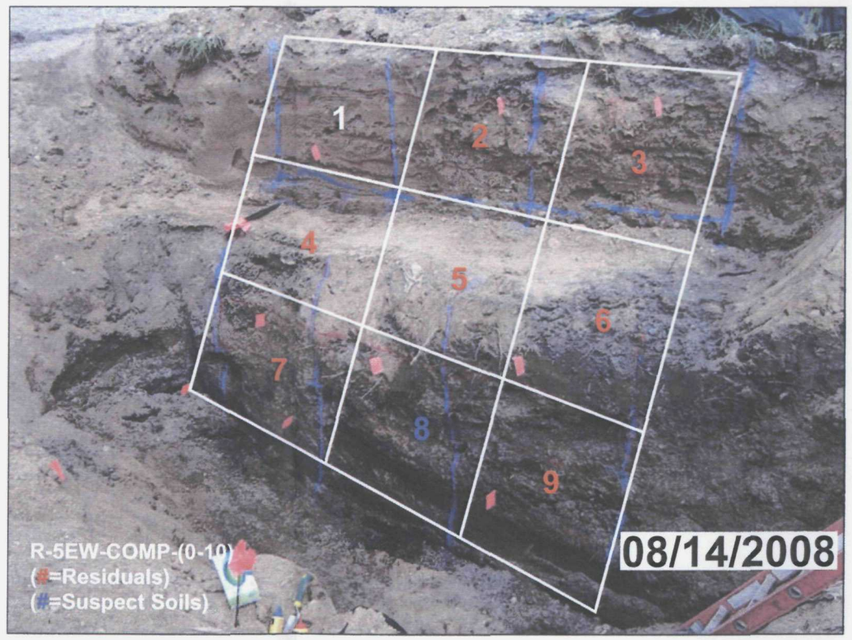

PHOTO NO. 21: R-5 EXCAVATION AREA EAST WALL COMPOSITE SAMPLE GRID – 0– TO 10–FOOT DEPTH INTERVAL

NOTE:

1. EACH COMPOSITE SIDEWALL SAMPLE (I.E., R–5SW–COMP–(4–8), R–5SW–COMP–(0–10), R–5EW–COMP–(0–4), R–5EW–COMP–(4–8), AND R–5EW–COMP–(0–10)) INCLUDES 9 DISCRETE GRAB SAMPLES SPATIALLY DISTRIBUTED ALONG THE SIDEWALL IN THE SQUARE GRID PATTERN DEPICTED ON PHOTO NOS. 17, 18, 19, 20, AND 21.
2. RED NUMBERS INDICATE A GRID AREA WHERE RESIDUALS WERE OBSERVED THROUGH VISUAL OBSERVATION.
3. BLUE NUMBERS INDICATE A GRID AREA WHERE SUSPECT SOILS (AREAS THAT COULD NOT BE POSITIVELY IDENTIFIED AS RESIDUALS) WERE OBSERVED THROUGH VISUAL OBSERVATION.
4. ORANGE PIN FLAGS WERE INSERTED AT LOCATIONS WHERE SAMPLES WERE COLLECTED. IN GRID AREAS WHERE RESIDUALS WERE OBSERVED, SAMPLES WERE BIASED TOWARDS THOSE RESIDUALS (I.E., SAMPLES WERE NOT NECESSARILY COLLECTED FROM THE CENTER OF EACH GRID AREA). NOTE THAT THE SAMPLE LOCATIONS ARE INDICATED BY THE PIN INSERTION POINT, NOT THE LOCATION OF THE ORANGE FLAG LOCATED ON THE END OF THE PIN.
5. LOCATIONS OF SAMPLING GRIDS SHOWN HEREON ARE APPROXIMATE, AS PHOTOS WERE TAKEN AT VARIOUS ANGLES AND VARY IN SCALE. THESE GRIDS ARE OVERLAIN FOR PRESENTATION PURPOSES ONLY TO INDICATE THE GENERAL AREA OVER WHICH THE SAMPLING GRID WAS PLOTTED.

NOT TO SCALE

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**R-5 EXCAVATION AREA - AUGUST 14, 2008
GRID COMPOSITE SAMPLE PHOTOS**

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FIGURE
10

CITY: SYRACUSE DIV/GROUP: 141 DB: LAF KMD LD: PIC: PM: TM: LYR: ON=*;OFF=*REF*
G:\CAD\ACT\B0064583\0000\00675\DWG\PHOTO\64583G05.DWG LAYOUT: 10 SAVED: 10/27/2008 8:43 AM ACADVER: 17.0S (LMS TECH) PAGESETUP: C:\LB-PDF-TABLOID PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 10/29/2008 1:05 PM BY: SCHILLING, ADAM
XREFS: IMAGES: PROJECTNAME: ---
64583X00 64583X17.JPG
64583X18.JPG
64583X19.JPG
64583X20.JPG
64583X21.JPG

PHOTO NO. 22: EXCAVATED SOIL FROM TEST PIT NO. 7

PHOTO NO. 23: TEST PIT NO. 7

PHOTO NO. 24: RESIDUALS OBSERVED IN TEST PIT NO. 7 – ANALYZED IN SAMPLE TP-7-1

PHOTO NO. 25: RESIDUALS OBSERVED IN TEST PIT NO. 7 – ANALYZED IN SAMPLE TP-7-2

PHOTO NO. 26: RESIDUALS OBSERVED IN TEST PIT NO. 7 – ANALYZED IN SAMPLE TP-7-3

NOT TO SCALE

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TEST PIT 7 PHOTOS

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FIGURE
11

PHOTO NO. 27: EXCAVATED SOILS FROM TEST PIT NO. 8

PHOTO NO. 28: TEST PIT NO. 8

PHOTO NO. 29: EXCAVATED SOIL FROM TEST PIT NO. 9

PHOTO NO. 30: TEST PIT NO. 9

PHOTO NO. 31: RESIDUALS OBSERVED IN TEST PIT NO. 9

NOT TO SCALE

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TEST PITS 8 AND 9 PHOTOS

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FIGURE
12

CITY: SYRACUSE DIV/GROUP: 141 DB: LAF KMD LD: PIC: PM: TM: LYR: ON=*;OFF=*REF*
G:\CADACT\B006458300000067\DWG\PHOTO\64583G07.DWG LAYOUT: 12 SAVED: 10/27/2008 8:44 AM ACADVER: 17.0S (LMS TECH) PAGESETUP: C-LB-PDF-TABLOID PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 10/29/2008 1:02 PM BY: SCHILLING, ADAM
XREFS: IMAGES: PROJECTNAME: ---
64583X00 64583X27.JPG
64583X28.JPG
64583X29.JPG
64583X30.JPG
64583X31.JPG